

The Economics of Insurance Classification: The Sound of One Invisible Hand Clapping

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TABLE OF CONTENTS

I.	INTRODUCTION	836
II.	BACKGROUND FOR ECONOMIC ANALYSES OF INSURANCE CLASSIFICATION	842
	A. <i>Economic Explanations for Insurance as a Phenomenon</i>	842
	B. <i>Adverse Selection and Moral Hazard</i>	844
	C. <i>The Classification Process</i>	845
	D. <i>The Personal Lines of Insurance</i>	847
	E. <i>Insurance is Essential</i>	852
III.	ECONOMIC ANALYSES OF INSURANCE CLASSIFICATION	853
	A. <i>Positive Predictions</i>	854
	B. <i>Normative Conclusions</i>	858
	C. <i>Economic Reasoning to Define Discrimination</i>	859
IV.	CRITIQUE	859
	A. <i>Insurers' Transaction Costs</i>	863
	1. <i>Loss Projection and Classification</i>	864
	2. <i>Sales Costs</i>	866
	3. <i>Cost of Delivering Compensation</i>	868
	4. <i>Reserves</i>	869
	B. <i>Insureds' Transaction Costs</i>	869
	1. <i>Making Rational Buying Decisions</i>	870
	2. <i>Costs of Choosing Among Sellers</i>	873
	3. <i>Application Costs</i>	874
	C. <i>Externalities</i>	874
	D. <i>Competition in the Insurance Market</i>	875
	E. <i>Is Refined Classification Desirable?</i>	876
	1. <i>Loss Control Incentives</i>	877
	2. <i>Efficiency Gains When Benefit to Some Exceeds Administrative Costs</i>	879
	3. <i>Benefit When Price = Marginal Cost = Expected Loss</i>	880
	4. <i>Classification as Necessary For Optimal Market Equilibrium</i>	881
	F. <i>Present Value as a Measure of Discrimination</i>	882
	G. <i>Fairness</i>	883
	H. <i>Mechanics of Insurance Regulation Schemes</i>	884
V.	PUBLIC POLICY IMPLICATIONS	885
	A. <i>Reforms Within the Existing Framework</i>	886

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B. *Beyond the Existing Framework*

889

VI. CONCLUSION

890

I. INTRODUCTION

Controversy about insurance classification often pits one group of insureds against another. Women charge that they pay too much for individual health and disability insurance and annuities.¹ They are told that for them to pay less, men will have to pay more and that the benefits derived by eliminating sex classification will be far outweighed by higher premiums for women in automobile and life insurance.²

1. For a summary of the differences in treatment of men and women in insurance, see Wortham, *Insurance Classification: Too Important to be Left to the Actuaries*, 19 U. MICH. J.L. REFORM 349, 375-77 (1986). Women also have complained that the more favorable rates they receive in life and automobile insurance are not commensurate with their statistical advantage. *Id.*

In *Los Angeles Dep't of Water and Power v. Manhart*, 435 U.S. 702 (1978), and *Ariz. Governing Comm. v. Norris*, 463 U.S. 1073 (1983), the Supreme Court considered whether women making higher contributions or receiving lower benefits from an employer-sponsored annuity plan violated Title VII of the Civil Rights Act of 1964. 42 U.S.C. §§ 2000e-2000e-17 (1982). The major share of the legal commentary on insurance classification concerns *Manhart*, *Norris*, and the issues raised in those cases. For citations to thirty such articles, comments, and notes, see Wortham, *supra* at 356 n.31.

Identical bills to ban classification based on race, color, sex, religion, or national origin in all lines of insurance were introduced by Senator Hatfield and Representative Dingell in the 96th Congress and revised versions were introduced in subsequent Congresses. H.R. 1793, 99th Cong., 1st Sess. (1985); S. 372, 98th Cong., 1st Sess. (1983); S. 2204, 97th Cong., 2d Sess. (1982); S. 2477, 96th Cong., 2d Sess., 126 CONG. REC. 6536-39 (1980); H.R. 100, 98th Cong., 1st Sess. (1983); H.R. 100, 97th Cong., 1st Sess. (1981); H.R. 100, 96th Cong., 1st Sess. (1979).

Five sets of extensive hearings have been held on these bills. Two of these were chaired by Senator Packwood, whose name also has come to be associated with the bill. *Fair Insurance Practices Act: Hearings on S. 372 Before the Senate Comm. on Commerce, Science, and Transportation*, 98th Cong., 1st Sess. (1983) [hereinafter cited as *Senate Hearings on S. 372*, 98th Cong.]; *Fair Insurance Practices Act: Hearings on S. 2204 Before the Senate Comm. on Commerce, Science, and Transportation*, 97th Cong., 2d Sess. (1982) [hereinafter cited as *Senate Hearings on S. 2204*, 97th Cong.]; *Nondiscrimination in Insurance Act: Hearings on S. 2477 Before the Subcomm. on Antitrust, Monopoly, and Business Rights of the Senate Comm. on the Judiciary*, 96th Cong., 2d Sess. (1980) [hereinafter cited as *Senate Hearings on S. 2477*, 96th Cong.]; *Nondiscrimination in Insurance Act of 1983: Hearings on H.R. 100 Before the Subcomm. on Commerce, Transportation, and Tourism of the House Comm. on Energy and Commerce*, 98th Cong., 1st Sess. (1983) [hereinafter cited as *House Hearings on H.R. 100*, 98th Cong.]; *Nondiscrimination in Insurance Act of 1981: Hearings on H.R. 100 Before the Subcomm. on Commerce, Transportation, and Tourism of the House Comm. on Energy and Commerce*, 97th Cong., 1st Sess. (1981) [hereinafter cited as *House Hearings on H.R. 100*, 97th Cong.].

Most of the controversy about these proposals has been over gender. At a hearing in 1983, Senator Packwood commented that the ban on gender was the only one that seemed of concern to insurers. *Senate Hearings on S. 372*, 98th Cong., *supra*, at 323.

The Senate Committee on Commerce, Science, and Transportation, chaired by Senator Packwood, reported the bill in the 97th Congress. S. Rep. No. 671, 97th Cong., 2d Sess. (1982). The House Committee on Energy and Commerce, chaired by Congressman Dingell, reported the bill in the 98th Congress, but amendments so emasculated it that its supporters abandoned it. *Opponents Rewrite Unisex Insurance Bill*, CONG. Q., March 31, 1984 at 706, 707.

The bill's text also has appeared as Title III of a proposed "Economic Equity Act," an omnibus bill of proposals addressed to sex equity in the past three Congresses. S. 1169, 99th Cong., 1st Sess. (1985); H.R. 2472, 99th Cong., 1st Sess. (1985); S. 288, 98th Cong., 1st Sess. (1983); H.R. 2090, 98th Cong., 1st Sess. (1983); S. 888, 97th Cong., 1st Sess. (1981); H.R. 2090, 97th Cong., 1st Sess. (1981).

Four states ban gender classification in automobile insurance, thus benefiting men as a group. HAW. REV. STAT. § 294-33 (1976); MASS. GEN. LAWS ANN. ch. 175, §§ 22E, 24A (West 1983 & Supp. 1985); MICH. COMP. LAWS ANN. § 500.2027(c) (West 1983); N.C. GEN. STAT. § 58-303 (1982 & Supp. 1985). Only one state bans gender classification in all lines of insurance. MONT. CODE ANN. § 49-2-309 (1985).

2. For examples of such arguments by representatives of insurance companies and trade groups, see *Senate Hearings on S. 372*, 98th Cong., *supra* note 1, at 303-08, 312, 314-16. Citations to articles on gender classification in automobile insurance can be found in Wortham, *supra* note 1, at 357 n.32.

Those afflicted with particular diseases or genetic traits call for protection against insurers' use of these characteristics to deny insurance or elevate its cost.³ They are told that it would be unfair for other insureds to subsidize these unlucky people regardless of how dire their need for insurance and regardless of whether their afflictions are beyond their control.⁴

Automobile insurance costs young, male, single, urban drivers more—sometimes vastly more—than other insureds.⁵ Against their rate protests are raised the picture of the safe, sober, respectable citizens who would have to pay more to subsidize these risky young men.⁶

Blacks charge that rating by residential zip code in property and automobile insurance is race discrimination.⁷ Territorial redlining in property insurance also is assailed for causing the decline of urban neighborhoods, since one cannot get a mortgage loan without property insurance.⁸ The prospect that citizens in the

3. A recent example in the District of Columbia is controversy over a bill to prohibit life and health insurance companies from denying coverage for someone who refused to take blood tests that can determine exposure to Acquired Immune Deficiency Syndrome virus. The proposal also imposes a five year moratorium before a rate differential could be proposed for such persons. During this period, the D.C. Public Health Commissioner is to decide which if any tests are reliable. *AIDS Bill Advances*, Wash. Post, April 23, 1986 at C5, col. 3. After enactment by the D.C. City Council and Mayor, the U.S. Senate voted to repeal the provision. 132 CONG. REC. S10104-10112 (daily ed. Aug. 1, 1986). (The Congress exercises broad legislative jurisdiction over the District of Columbia. U.S. CONST. art. I § 8, cl. 17.) The American Council of Life Insurance and the Health Insurance Association of America have sought to enjoin the D.C. law. *Insurance Groups Sue to Block D.C. AIDS Law*, Wash. Post, Aug. 6, 1986, at B3, col. 4-6.

For state statutes proscribing classifications based on physical or mental impairment, a specific disability or a genetic trait, see Wortham, *supra* note 1, at 367. See Bailey, Hutchison, & Narber, *The Regulatory Challenge to Life Insurance Classification*, 25 *DRAKE L. REV.* 779, 795 (1976) (bans on use of genetic defect in rating or underwriting in life insurance).

Senator Mathias has proposed a federal statute banning blindness as a classification. S. 1290, 99th Cong., 2d Sess. (1985); S. 2775, 98th Cong., 2d Sess., 130 CONG. REC. S7646-48 (daily ed. June 19, 1984).

4. Commenting on the D.C. proposal to ban exposure to AIDS virus as an insurance classification, Russ Iuculano, legislative director of the American Council of Life Insurance Companies, charged that "Healthy persons will have to pay an AIDS tax [if passed]." *AIDS Bill Advances*, *supra* note 3.

5. *Rights and Remedies of Insurance Policy Holders, Part I: Discrimination by Property and Casualty Insurance Companies: The Fairness in the Coverage and Cost of Insurance: Hearings Before the Subcomm. on Citizens and Shareholders Rights and Remedies of the Senate Comm. on the Judiciary*, 95th Cong., 2d Sess. 8-12, (1978) [hereinafter cited as *Senate Oversight Hearings on Discrimination in Property and Casualty Ins.*, 95th Cong.]. A 1979 General Accounting Office study of classification practices gave as examples in Massachusetts, before Insurance Commissioner Stone's ordered changes, a 24-year-old male driver with no accidents living in East Boston who would have to pay \$2,512 for car insurance on a three-year-old Chevrolet Malibu and an elderly resident of Deerfield, Massachusetts who would pay \$160 for the same car and same coverages even if the Deerfield man had had two accidents in the previous year. U.S. GENERAL ACCOUNTING OFFICE, REPORT TO THE CONGRESS BY THE COMPTROLLER GENERAL: ISSUES AND NEEDED IMPROVEMENTS IN STATE REGULATION OF THE INSURANCE BUSINESS 104, 113 (1979) [hereinafter cited as GAO REP.]. For citations to articles on gender and territorial classification, see Wortham, *supra* note 1, at 357 n.32.

6. See *Senate Oversight Hearings on Discrimination in Property and Casualty Ins.*, 95th Cong., *supra* note 5, at 157-67 (testimony by a representative of a property-casualty trade association). In recent testimony before the House Judiciary Committee, former Representative Robert McClory commented on allegations that current classification unfairly discriminates against consumers such as city residents and male motorists aged 18 to 25: "As a senior citizen and a non drinker with a good safety record I am personally alarmed at the prospect of . . . [proposals] . . . which would require me to subsidize the high risk motorist who gets behind the wheel." *Competition in the Insurance Industry: Oversight Hearings Before the Subcomm. on Monopolies and Commercial Law of the House Comm. on the Judiciary*, 98th Cong., 2d Sess. 27, 29 (1984) [hereinafter cited as *House Hearings on Competition*, 98th Cong.].

7. *Dunn v. Midwestern Indem. Mid-Am. Fire and Casualty Co.*, 472 F. Supp. 1106 (S.D. Ohio 1979). For five studies of territorial classification and its effects, see *Senate Oversight Hearings on Discrimination in Property and Casualty Ins.*, 95th Cong., *supra* note 5, at 223-351, 352-409, 410-51, 452-87, 634-48.

8. MEETING THE INSURANCE CRISIS OF OUR CITIES: A REPORT BY THE PRESIDENT'S NATIONAL ADVISORY PANEL ON INSURANCE IN RIOT-AFFECTED AREAS 1 (1968) [hereinafter cited as HUGHES PANEL REP.]; *Senate Oversight Hearings on Discrimination*

countryside and suburban areas would pay more if insureds were pooled more broadly is invoked against proposals to restrict insurers' discretion to classify by neighborhoods.⁹

Controversy about such classifications has raged in state insurance commissions, state legislatures, the Congress, and state and federal courts.¹⁰ Casting of one group of insureds against another portrays insurance as fitting the economic theory model of the zero-sum game, with one insured gaining only at the expense of another.¹¹ This divides insurance consumers against one another. It also deflects attention from the way classification is practiced and regulated, and from the losses that may fall on third parties when people are uninsured or inadequately insured, the external costs that diminish society's wealth.

In an earlier article, I questioned the fairness of the status quo in insurance classification and its regulation and challenged the claim of insurers and most regulators that classification is a neutral, scientific process based on statistical differences.¹² I also disputed the contention that refined classifications are encouraged or required by state law.¹³

Here I turn to the validity of economic analyses of refined classification for the personal lines of insurance generally purchased by individuals: automobile, homeowner's, renter's, health, life, and disability insurance.¹⁴ My conclusions differ from much of what has appeared recently in writings on classification in law reviews and public policy journals.¹⁵

in *Property and Casualty Ins.*, 95th Cong., *supra* note 5, at 31-34. Citations to articles on territorial classification can be found in Wortham, *supra* note 1, at 357 n.32.

Senator Metzenbaum introduced a bill in 1980 that would limit rate differentials based on territory in property and automobile insurance while also banning the use of marital status, personal living habits, appearance, marital history, political activities, and in some instances, occupation. The Insurance Competition Improvement Act, S. 2474, 96th Cong., 2d Sess., 126 CONG. REC. 6529-36 (1980) [hereinafter cited as S. 2474, 96th Cong.]. Testimony on the bill can be found in *Insurance Competition Improvement Act, S.2474, Hearing Before the Senate Subcommittee on Antitrust, Monopoly and Business Rights of the Comm. on the Judiciary*, 96th Cong., 2d. Sess. (1980) [hereinafter cited as *Senate Hearings on S. 2474*].

9. *Senate Oversight Hearings on Discrimination in Property and Casualty Ins.*, 95th Cong., *supra* note 5, at 170-74.

10. Wortham, *supra* note 1, at 354-58 (overview of controversial classifications and areas where controversy has raged); *supra* notes 1-9 and accompanying text.

11. Benston, *Discrimination and Economic Efficiency in Employee Fringe Benefits: A Clarification of Issues and a Response to Professors Brilmayer, Laycock, and Sullivan*, 50 U. CHI. L. REV. 250, 273 (1983) [hereinafter cited as *Benston II*] uses the phrase: "Neither the Supreme Court nor the Brilmayer group appears to recognize that annuities and insurance generally are zero-sum games. All of the premiums collected, plus earnings from invested funds, less administrative expenses and reserves for contingencies, are paid to the policy holders." (Emphasis added). Benston, *The Economics of Gender Discrimination in Employee Fringe Benefits: Manhart Revisited*, 49 U. CHI. L. REV. 489 (1982) [hereinafter cited as *Benston I*] lays the groundwork for this approach. For elaboration on the zero-sum framework, see *infra* notes 144-47 and accompanying text. For my critique, see *infra* notes 412-13 and accompanying text.

12. Wortham, *supra* note 1, at 370-81.

13. Wortham, *supra* note 1, at 381-93.

14. See *infra* notes 75-121 and accompanying text for background on these lines: structure of the industry, coverage, sales methods, common classifications and regulation.

15. The characterization of insurance as a zero-sum game appears in *Benston II*, *supra* note 11, at 273. See *supra* note 11 and *infra* notes 144-47 and accompanying text for further explanation of Benston's assertion, and *infra* notes 412-13 and accompanying text for my critique.

Benston also states that the use of any classification for which benefits to a subgroup exceed administrative cost promotes efficiency. *Benston I*, *supra* note 11, at 497-98. See *infra* note 182 and accompanying text for further explanation and *infra* notes 364-69 and accompanying text for my critique.

A third argument of Benston's, addressed by this Article, is that an economic definition of present value should be

used to define discrimination when insurance is involved. *Benston I*, *supra* note 11, at 497–98. Three articles by Richard Miller make the same argument: Miller, *Discrimination by Gender in Automobile Insurance: A Note on Hartford Accident and Indemnity Co. v. Insurance Commissioner*, 23 DUQ. L. REV. 621 (1985) [hereinafter cited as Miller, *Discrimination by Gender*]; Miller, *How to Discriminate by Sex: Federal Regulation of the Insurance Industry*, 17 CONN. L. REV. 567 (1985); Miller, *Gender Based Mortality Tables and the Insurance Industry: Manufacturers Hanover Trust Co. v. United States*, 18 CONN. L. REV. 393 (1986). For further explanation of the argument, see *infra* notes 190–96 and accompanying text. For my critique, see *infra* notes 385–87 and accompanying text. Kimball, *Reverse Sex Discrimination: Manhart*, 1979 AM. B. FOUND. RES. J. 83, 106–08 (1979), makes a similar point without putting it into economic language. Brilmayer, Laycock & Sullivan, *The Efficient Use of Group Averages as Nondiscrimination: A Rejoinder to Professor Benston*, 50 U. CHI. L. REV. 222, 223 (1983) argues that Benston adds nothing to Kimball. See Benston commenting on Kimball, *Benston I*, *supra* note 11, at 501–02.

Benston alludes to insureds paying a “fair share,” *Benston I*, *supra* note 11, at 498, but that is a moral concept rather than an economic one. See Williams, *Unfair Rate Discrimination in Property and Liability Insurance*, in *INSURANCE, GOVERNMENT, AND SOCIAL POLICY* 209, 239–40 (S. Kimball and H. Denenberg eds. 1969) (concluding that the notion of unfair discrimination in insurance rate classification is a moral concept with no strong economic arguments in support).

Benston also spends considerable time in his articles on the arguments that prohibition of sex classification in employee fringe benefits will hurt women in the job market. *Benston I*, *supra* note 11, at 532–41. In doing so, he was responding to Key, *Sex-Based Pension Plans in Perspective: City of Los Angeles Department of Water & Power v. Manhart*, 2 HARV. WOMEN'S L.J. 1 (1979). See *infra* note 143 for a brief description of those arguments, but they are not dealt with substantively in this Article.

Kenneth Abraham recently published an excellent book offering a much needed conceptual framework for insurance law generally. K. ABRAHAM, *DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY* (1986) [hereinafter cited as K. ABRAHAM]. He sees promotion of economic efficiency as one of the three principal purposes that insurance law does, and should, serve. *Id.* at 9–18. (The other two are fair distribution of risk and promoting equitable relations between insurers and insureds.) *Id.* at 18–36. Chapter IV of the book appeared previously as Abraham, *Efficiency and Fairness in Insurance Risk Classification*, 71 VA. L. REV. 403 (1985). There and elsewhere in the book, Abraham defines the promotion of economic efficiency by classification in its relation to loss control as giving people incentives to compare the cost of insurance to the cost of loss reduction and to consider foregoing risky activities. K. ABRAHAM at 65–66, 77–78. Efficiency is promoted by accurate risk classification because the sum of the costs of insurance and loss prevention may be reduced, *id.* at 11, and resources will be allocated optimally to insurance and to loss prevention, *id.* at 12. If insurance is overpriced, people will devote too many resources to loss prevention or savings against loss and be unable to satisfy their desire to avert risk. If insurance is underpriced, people may buy more insurance and skimp on loss prevention. The existence of insurance may encourage them to take less care. *Id.* at 15. Because the reality of risk classification is so far from the ideal of perfect information, I find the conclusions on optimal allocation and moral hazard to have limited force. See *infra* notes 183–88 and accompanying text on Abraham's analysis and *infra* notes 370–72 and accompanying text for my critique. Promotion of loss control is a sensible criterion for approval of a classification's use, but I propose some additional factors to be considered. See *infra* notes 148–49, 181 and accompanying text on Abraham's analysis and *infra* notes 351–63 and accompanying text for my comments.

Abraham presents economic efficiency as one purpose that appropriately may yield to other purposes in some circumstances. He shares my concern for availability, but phrases it in terms of promotion of equality as a value. K. ABRAHAM at 29–31.

Four faculty members at the Wharton School at the University of Pennsylvania summarize recent works from economics scholarly journals on the workings of the insurance market in D. CUMMINS, B. SMITH, N. VANCE, & J. VANDERHEI, *RISK CLASSIFICATION IN LIFE INSURANCE* 27–62 (1983). [hereinafter cited as D. Cummins] They characterize instability and eventual failure of voluntary insurance markets when rating does not reflect the degree of risk presented by insureds as “the economic rationale for risk classification.” *Id.* at 27. For further explanation of this analysis, see *infra* notes 152–80, 189 and accompanying text. For my criticism, see *infra* notes 373–84 and accompanying text.

Stewart Kemp, a former counsel to Senator Metzenbaum's subcommittee which considered the Insurance Competition Improvement Act, and now an official in the Massachusetts Department of Insurance, challenges superficial conclusions about deregulation of insurance as promoting desirable competition based on an analysis of the actual workings of the insurance market. Kemp, *Insurance and Competition*, 17 IDAHO L. REV. 547 (1981). (For information on Senator Metzenbaum's bill, see *supra* note 8 and accompanying text).

Three economists writing for interdisciplinary journals have pointed out externalities that arise in insurance and made useful observations about alternative regulatory mechanisms to address such externalities. Keeton & Kwerel, *Externalities in Automobile Insurance and the Underinsured Driver Problem*, 27 J. L. & ECON. 149 (1984) and Vickrey, *Automobile Accidents, Tort Law, Externalities, and Insurance: An Economist's Critique*, 33 LAW & CONTEMP. PROBS. 464 (1968).

Works, *Whatever's FAIR—Adequacy, Equity, and the Underwriting Prerogative in Property Insurance Markets*, 56 NEB. L. REV. 445 (1977) generally does not take an economic perspective, but this insightful article does make some points about the way economic incentives lead insurers to classify and how insurance availability shortages develop in response.

Two student works, Comment, *Banning “Actuarially Sound” Discrimination: The Proposed Nondiscrimination in*

But more is at stake than an academic dispute. Explicit and implicit economic arguments figure prominently in the public debate about what actions federal and state regulators and legislators should take in regulating classification.¹⁶ The dominant theme in such arguments is that economics is entirely on the side of unfettered discretion to classify, and that mischief is done when classification discretion is restricted to achieve social goals.¹⁷

Economic reasoning offers little justification for the way insurance classification actually is practiced in the personal lines. Indeed, it may support some types of market intervention, if not completely new structures, to provide the functions served by private insurance. An economic case can be made for a limited group of classifications that actually promote loss control, but those represent a relatively small percentage of the classifications used.¹⁸ Even classifications that seem to provide incentives for loss control should be scrutinized carefully to see if an actual reduction in overall losses is likely to result.¹⁹

Broad conclusions opposing all classification restrictions fail for one or more of the following reasons. Neoclassical economic models of markets rest on a number of assumptions that vary widely from the reality of insurance markets. Three premises that present particular problems are: 1) actors in the market behave as rational utility maximizers as predicted by expected utility theory; 2) perfect information; 3) no transaction costs. Empirical evidence and controlled experiments on actual insurance buying behavior dispute whether people actually behave as predicted by expected utility theory.²⁰ Information problems abound in the insurance markets, particularly the markets for the personal lines.²¹ In large part because of the severe information problems, transaction costs are extremely high.²²

The neoclassicist reasons that competition will pressure price to marginal cost. For insurance, marginal cost would be the actuarially fair premium based on classifications of insureds' riskiness.²³ Price competition, however, functions poorly in many segments of the insurance market.²⁴

Insurance Act, 20 HARV. J. ON LEGIS. 631 (1983), and Note, *Norris v. Arizona: A Move Toward Unisex Insurance*, 45 LA. L. REV. 149 (1984), employ some economic arguments as part of their analyses, but do not add anything necessary to comment upon in this Article.

16. D-3 ADVISORY COMMITTEE, PRIVATE PASSENGER AUTOMOBILE INSURANCE RATE CLASSIFICATION (1979) [hereinafter cited as NAIC ADVISORY COMM. REP.] is a lengthy critique by an insurer advisory committee in response to a National Association of Insurance Commissioners task force report recommending abolition of sex and marital status as classification variables in private passenger automobile insurance. (The task force report had retreated from an earlier version recommending the abolition of age as well.) *Id.* at 7. This insurer advisory committee report refers to pricing at expected costs as a "fundamental economic principle." *Id.* at 1.

17. As put by an insurer advisory group, "The American economic system works best when perceived social concerns are not allowed to preempt economic fact, lest incurable market dislocation result." NAIC ADVISORY COMM. REP., *supra* note 16, at 4.

18. See *infra* notes 64-74 and accompanying text on the classification process.

19. See *infra* notes 356-63 and accompanying text.

20. See *infra* notes 294-320 and accompanying text.

21. See *infra* notes 241-54, 294-332 and accompanying text.

22. See *infra* notes 238-332 and accompanying text.

23. See *infra* notes 45, 183-88 and accompanying text.

24. See *infra* notes 339-48 and accompanying text.

Most law and economics writings on insurance classification take the Chicago School approach, resting on neoclassical analysis.²⁵ In neoclassical terms, much of the following can be synthesized to the overall conclusion that the economic justification for letting market-determined classifications stand unregulated is weak because there is market failure on both the supply and demand sides.²⁶ A neoclassicist's prescription for reform often will be initiatives to improve the functioning of the market.

This Article also analyzes insurance classification from a second approach to law and economics, the institutionalist or transaction cost approach. Institutionalists focus on the consequences of imperfect information and bounded rationality—two problems particularly acute with regard to insurance. Institutionalists go beyond the market to consider whether there are institutional arrangements that might reduce transaction costs and discourage opportunistic behavior.²⁷

Two of the major arguments about classification made in law reviews—efficiency is enhanced by use of any classification for which benefits to a subgroup exceed costs and discrimination should be measured by present value—are misstatements even of neoclassical theory.²⁸ Another limitation on previous analyses is that most ignore externalities created when people are uninsured or underinsured.²⁹

After a background section designed to aid those with limited knowledge of economic theory about insurance and insurance practices,³⁰ the third part of this Article surveys the contentions about the applicability of economic theory to classification argued in the legal literature and the policy debate up to now.³¹ Part IV then points out the shortcomings in that work (along the lines previously described) and outlines the ways in which economic theory should be taken into account in the insurance classification debate.³² The final section describes some public policy implications of my views on the economics of classification, both from a neoclassical and from an institutionalist perspective.³³

25. Perhaps most often associated with the movement is Judge Richard Posner. One of his central works is *ECONOMIC ANALYSIS OF LAW* (2d ed. 1977). For a description of the assumptions of neoclassical economics and its contrast to the institutionalist or transaction cost approach, see generally P. BURROWS & C. VELJANOVSKI, *THE ECONOMIC APPROACH TO LAW* 1-34 (1981) and G. GARVEY, *TREBLE DAMAGE IN ANTITRUST* (to be published in 1987).

K. ABRAHAM, *supra* note 15, touches on some of the concerns of the institutionalists although his discussion of economics generally follows a neoclassical framework. He considers economic efficiency as only one possible goal of insurance law and argues that other values might sometimes supercede it. *Id.* at 8-41. His book brings not only an economic perspective but a philosophical one.

Guido Calabresi deals with insurance in some of his works on tort, e.g., *THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* (1970). His approach focuses on institutionalist concerns.

A professor of decision science, Howard Kunreuther, has written extensively on alternative institutional structures for disaster insurance. See, e.g., Kunreuther & Slovic, *Economics, Psychology, and Protective Behavior*, 68 AM. ECON. REV. PAPERS AND PROC. 64 (1978); Kunreuther, *Limited Knowledge and Insurance Protection*, 24 PUB. POL'Y 227 (1976).

26. My thanks to Kenneth Abraham for this phrasing.

27. P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 1-34 and G. GARVEY, *supra* note 25.

28. See *infra* notes 182, 190-96, 364-69, 385-87 and accompanying text.

29. See *infra* notes 333-38 and accompanying text.

30. See *infra* notes 33-135 and accompanying text.

31. See *infra* notes 136-96 and accompanying text.

32. See *infra* notes 197-401 and accompanying text.

33. See *infra* notes 402-39 and accompanying text.

Before turning to these sections on the application of economic theory to classification, Part II provides background for understanding what follows. For those readers unfamiliar with relevant areas of economic theory, the first half of Part II reviews the rationale for the existence of insurance and basic models of insured and insurer behavior.³⁴ For those with a limited background in insurance, the second half of Part II describes how insurance classification works,³⁵ addresses the coverage, sales methods, and regulation extant for the personal lines,³⁶ and argues for the essential nature of insurance.³⁷

II. BACKGROUND FOR ECONOMIC ANALYSES OF INSURANCE CLASSIFICATION

The first subpart that follows reviews expected utility theory, the rock upon which rests the explanations for insurance as a phenomenon and how it is purchased. The second subpart explains "moral hazard" and "adverse selection," two concepts thought to explain much insured and insurer behavior. The third subpart describes classification and its use in insurance. The fourth subpart provides background on the personal lines of insurance. The final subpart argues the essential nature of the personal lines, a conviction that drives many of my policy recommendations.

A. *Economic Explanations for Insurance as a Phenomenon*

Most economic discussions of insurance invoke expected utility theory as a model to predict and explain consumer buying behavior, a "positive" analysis.³⁸ Expected utility theory also is used as a normative model⁴ for rational choice to explain when insurance should be purchased.³⁹

Expected utility theory posits that when people make decisions about uncertain events they try to maximize expected utility, which is defined as the sum of the products of the utilities of possible outcomes and the probabilities that each will occur.⁴⁰ In another formulation, the axioms of the expected utility model "imply that the consistent man behaves as if he assigns personal probabilities to different states of nature, assigns numerical utilities to the results of each possible course of action, and then chooses the action with the highest expected utility."⁴¹ The calculation of utility is based on a consideration of the value of the assets the person will have if the risky outcome occurs with or without insurance.⁴²

34. See *infra* notes 38–63 and accompanying text.

35. See *infra* notes 64–74 and accompanying text.

36. See *infra* notes 75–121 and accompanying text.

37. See *infra* notes 122–35 and accompanying text.

38. For a definition of positive versus normative economics, see *infra* notes 139–41 and accompanying text.

39. Kahneman & Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 263 (1979); Kunreuther, *supra* note 25, at 228; Slovic, Fischhoff, Lichtenstein, Corrigan, & Combs, *Preference for Insuring Against Probable Small Losses: Insurance Implications*, 44 *J. RISK INS.* 237, 238 (1977) [hereinafter cited as Slovic].

40. Slovic, *supra* note 39, at 238.

41. Kunreuther, *supra* note 25, at 228; see generally Friedman and Savage, *The Utility Analysis of Choices Involving Risk*, 56 *J. POL. ECON.* 279 (1948) (for history, explanation, and further development of expected utility theory).

42. Kahneman & Tversky, *supra* note 39, at 263–64, refer to this calculation based on difference in total wealth as asset integration.

Traditionally it is assumed that most people are risk averse—they would prefer insurance with a premium x to facing without insurance a loss with expected value x .⁴³ Expected value is the mean of the sums of the probability of loss multiplied by the magnitude in each instance, for example, the mean of the sums of a ninety percent probability of zero loss plus a ten percent probability of \$1000 loss yields an expected value of \$100.⁴⁴ If a person behaves according to the axioms of expected utility theory and is risk averse, he would rather pay \$100 for insurance than risk a \$1000 loss with a 10 percent probability, a \$500 loss with a 20 percent probability, or a \$200 loss with a 50 percent probability. The expected value is considered to be the actuarially fair premium.⁴⁵

Expected utility theory predicts that a risk averter always will choose to buy insurance at actuarially fair rates.⁴⁶ Actuarially fair premiums are “loaded” with a factor for administrative cost.⁴⁷ It is predicted that insureds still will want to buy this loaded actuarially “unfair” policy so long as it is not too unfair.⁴⁸ Because fixed administrative costs increase the cost most on first dollar coverage, making it most actuarially unfair, it is posited that insureds will prefer, and the optimum coverage will be, full coverage above a deductible amount.⁴⁹

Expected utility theory provides a basis for the case that insurance provides societal benefits.⁵⁰ Risk averting behavior may reflect the stability and psychological security insurance can provide. For the personal lines of insurance, it means alleviating the fear that liability from an automobile or property related accident will bring financial ruin at worst or troublesome litigation costs at best. Automobile and homeowner's insurance also ensure there will be adequate funds to repair one's own damaged property, thus allowing people to invest with less anxiety about protection of their investment. Life and disability insurance permit preservation of the lifestyle of one's family in the event of illness or death. Health insurance guarantees access to needed health care.

There is a social gain if insurers can provide this insurance at adequate premiums to assure insurers do not suffer a loss.⁵¹ If risks are independent and the sample sufficiently large, the law of large numbers allows pooling of insureds to present a small risk of financial loss to insurers.⁵²

43. A.M. POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 27, 57 (1983); Doherty & Schlesinger, *Optimal Insurance in Incomplete Markets*, 91 J. POL. ECON. 1045, 1047 (1983); Pauly, *The Economics of Moral Hazard: Comment*, 50 AM. ECON. REV. 531 (1968).

44. C. GOETZ, CASES AND MATERIALS ON LAW AND ECONOMICS 77–79 (1984) (calculation of expected value).

45. Doherty & Schlesinger, *supra* note 43, at 1047.

46. Slovic, *supra* note 39, at 239. See *infra* notes 294–320 disputing that this is the case.

47. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AMER. ECON. REV. 941, 960 (1963). Arrow says loading also may include a cost of capital tied up and a factor for the insurer's risk aversion depending on the uncertainty of the risk.

48. *Id.*

49. *Id.* See *infra* notes 300, 308 and accompanying text disputing this claim.

50. Arrow, *supra* note 47, making the case for government provision of medical insurance when private markets fail to arise, is often cited in this regard.

51. Arrow, *supra* note 47, at 960.

52. *Id.*; Saba, *An Alternative Theory of the Regulation of Automobile Insurance*, 45 S. ECON. J. 469, 470 (1978); A.M. POLINSKY, *supra* note 43, at 52.

B. Adverse Selection and Moral Hazard

In theory, the concepts of adverse selection and moral hazard explain the major differences between the sale of insurance and the sale of most other commodities. Economists often characterize both adverse selection and moral hazard as asymmetrical information problems: they emerge when the insured has more information about and control of certain phenomena than does the insurer.⁵³ Adverse selection theory posits that people who believe they are likely to use a particular insurance coverage will be more likely to purchase it and more willing to purchase it at higher prices than those who see their risk as remote.⁵⁴

The ability of insurers to write insurance without loss is based on the notion that losses can be predicted for a large group from the past experience of people with similar characteristics. Insurers fear adverse selection because it means that the group of people who actually purchase a particular insurance coverage will not have the same characteristics as the group on whose past losses premiums were calculated.⁵⁵

Moral hazard refers to situations when the behavior of the insured may affect the probability of various outcomes. At least three types of behavior are labelled moral hazard. The first is when an insured purposely causes harm or otherwise falsifies loss in order to collect insurance benefits or inflate the cost of loss.⁵⁶ This includes the person who sets fire to an unprofitable structure, reports a car stolen that he in fact has abandoned, or inflates the number and cost of items stolen in a burglary.⁵⁷

Second are situations where the fact of insurance may induce greater use of an insured service or cause the insured to exercise less care.⁵⁸ There has been much discussion, for example, about whether the existence of insurance causes people to purchase more medical services and to be less concerned about costs than if they were paying the expenses themselves.⁵⁹

53. See Marshall, *Insurance Theory: Reserves Versus Mutuality*, 12 *ECON. INQUIRY* 476, 481 (1974); Pauly, *Overinsurance and Public Provision of Insurance: The Roles of Moral Hazard and Adverse Selection*, 88 *Q. J. ECON.* 44, 45 (1974); Rubinstein & Yaari, *Repeated Insurance Contracts and Moral Hazard*, 30 *J. ECON. THEORY* 74, 74 (1983).

54. Adverse selection occurs when the class of risks (or set of classes) that purchases insurance differs 'adversely' from that anticipated by the firm. For example, if a firm offers a contract to low-risk types at their actuarially fair rate, then high-risk types will also purchase it, with the result that the firm will earn (expected) losses. Hence the problem of adverse selection restricts the ability of firms to offer efficient insurance contracts to low-risk types.

Hoy, *The Impact of Imperfectly Categorizing Risks on Income Inequality and Social Welfare*, 17 *CAN. J. ECON.* 557, 557 (1984).

55. Works, *supra* note 15, at 459, 465-66.

56. Definitions of moral hazard by economists usually are broad enough to encompass this type of moral hazard as well as the second type—reduced incentives to take care or make greater use of the insured service. For example, "[m]oral hazard arises when an individual has the ability to affect his loss in some or all states by taking some 'discretionary' action." Kihlstrom & Pauly, *The Role of Insurance in the Allocation of Risk*, 61 *AMER. ECON. REV. PAPERS AND PROC.* 371, 378 (1971). Another economist uses the term moral hazard to refer to "the tendency of insurance protection to alter an individual's motive to prevent loss." Shavell, *On Moral Hazard and Insurance*, 93 *Q. J. ECON.* 541, 541 (1979).

57. Ghezzi, *A Private Network of Social Control: Insurance Investigation Units*, 30 *SOC. PROBS.* 521, 521 (1983), reports estimates in Massachusetts of 25% of reported theft claims as fraudulent. Kemp, *supra* note 15, at 560, an official in the Massachusetts Insurance Department, reported observations of 10% to 20% fraudulent and padded claims in some lines such as auto insurance.

58. F. CRANE, *INSURANCE PRINCIPLES AND PRACTICES* 7 (2d ed. 1984) refers to this as "morale hazard".

59. Feldstein, *The Welfare Loss of Excess Health Insurance*, 81 *J. POL. ECON.* 251, 251-52, 276-77 (1973).

The third use of moral hazard refers to situations where rates reflect judgments about riskiness, but the insured has more information than the insurer.⁶⁰ It is difficult for an insurer to determine whether someone in fact is being truthful in saying whether or not they smoke for the purposes of being classified more favorably as a nonsmoker.

Asymmetrical information problems that result in moral hazard and adverse selection are the two variations from the ideal competitive market with perfect information that economists have addressed in detail. The possibility of adverse selection has been predicted to result in unstable markets and reduced availability.⁶¹ Classification has been termed the most important device for dealing with moral hazard of the second previously described type—when over-insurance leads to over-consumption of an insured service or laxity in taking care.⁶² Avoidance of moral hazard is given by insurers as a criterion for choosing among possible classifiers—alluding to the third previously described type of moral hazard.⁶³ These assertions are examined more fully in sections that follow.

C. The Classification Process

Insurers use classifications when deciding whom to insure (the underwriting decision), what coverages to offer to a particular applicant (the coverage decision), and how much to charge (the rating decision).⁶⁴ Law and economics commentators assume that insurers have no incentives to choose classifiers except those that predict riskiness.⁶⁵ Some evidence indicates that classifications may be chosen to attract buyers in the personal lines who own more property and thus are more likely to buy larger and multiple policies.⁶⁶

A. M. POLINSKY, *supra* note 43, at 54–55, discusses this usage of moral hazard and identifies deductibles and coinsurance as the remedies generally suggested.

60. *Benston I*, *supra* note 11, at 512. This is the type of moral hazard that enables insureds to adversely select. See *supra* note 53 and accompanying text. Economic journal articles usually refer to the first two types of moral hazard rather than this one. The first two types refer to insurers' inability to monitor conditions of the insured after the insurance contract is made. This type of moral hazard may refer to insurers' lack of information about both past and future conditions of the insured.

61. See *infra* notes 152–80 and accompanying text.

62. K. ABRAHAM, *supra* note 15, at 15.

63. See *infra* note 70 and accompanying text.

64. Wortham, *supra* note 1, at 354 n.19.

65. *Benston I*, *supra* note 11, at 529, says: "There is no reason to expect insurers consciously to use any variables other than those that provide efficient estimates of risk." He offers as the only possible basis for a choice other than on riskiness, "a taste for discrimination." K. ABRAHAM, *supra* note 15, at 77 says, "Other things being equal, insurers strive to charge insureds in accord with their expected costs." He notes that he uses expected loss and expected cost interchangeably except when the difference is meaningful. *Id.* Later he says, "In a system of market-supplied insurance, insurers already have an incentive to classify accurately even in the absence of legal intervention." *Id.* at 84.

66. *Order of the New Jersey Insurance Commissioner*, reprinted in *House Hearings on H.R. 100*, 98th Cong., *supra* note 1, at 1064–65. A Critical Legal Studies scholar alleges that the classification system parallels socio-economic status. Austin, *The Insurance Classification Controversy*, 131 U. PA. L. REV. 517, 534–48 (1983). Dr. Buford Brinlee, a Florida political science professor, set up a system for providing computerized consumer information on automobile insurance in Texas. He testified before a House subcommittee that agents reserved a number of low-priced companies for special clients, often those who were willing to buy more than one type of policy from the agent or company. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 86, 91. For a discussion of the possibility that insurers might cut premiums in the commercial lines and subsidize losses with premiums from the personal lines, see *infra* note 245 and accompanying text.

Such a motivation for choice may be economically rational for three reasons. First, the overhead cost of selling might be reduced commensurately. Second, when interest rates are high, insurers can make a profit through investments on premium reserves in the face of underwriting losses. Thus, it may be rational to relax underwriting standards based on riskiness to increase the volume of premiums.⁶⁷ Third, insureds who buy several policies may be perceived as more likely to be repeat customers for whom it has been suggested there is less chance of moral hazard.⁶⁸ Such rationales for classification may be economically rational behavior, but they are quite different from claims that classification is inherently fair because "each pays his own way." Although state unfair discrimination laws require all classifications used to be statistically associated with risk, regulators do little to assure this is true.⁶⁹

Even if they only use classifiers statistically associated with risk, insurers admit that they do not use all such possible classifiers. Factors usually cited as the basis for choosing among classifications are stability, reliability, and administrative convenience.⁷⁰ For past experience to predict future losses and the law of large numbers to hold, the relationship of the classification to loss must be stable, that is, expected to persist in the future. To avoid moral hazard, insurers are concerned that classifications used be reliable, that is, difficult to misrepresent. Classifications also must be administratively cheap enough to use so that cost does not exceed the benefit of lower premiums for one group of insureds.⁷¹

The classifications used may be able to predict a relatively small percentage of losses. The Stanford Research Institute found auto classification schemes predict no more than thirty percent of losses.⁷² The General Accounting Office examined whether that showed the classification plans were doing a good or a poor job and concluded that "no one knows just what that 30 percent is relative to. Clearly, the practical limits of explaining variance in loss expectancy is considerably short of 100 percent, but we do not know what the upper limit is."⁷³

67. Wortham, *supra* note 1, at 377-78. J. WILSON & R. HUNTER, INVESTMENT INCOME AND PROFITABILITY IN PROPERTY/CASUALTY INSURANCE RATEMAKING: AN INDEPENDENT REPORT TO THE NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS TASK FORCE ON PROFITABILITY AND INVESTMENT INCOME, *printed in* REPORT OF THE ADVISORY COMMITTEE TO THE NAIC TASK FORCE ON PROFITABILITY AND INVESTMENT INCOME, VOLUME II 66-71 (1983) [hereinafter cited as WILSON & HUNTER REP.].

68. Rubenstein & Yaari, *supra* note 53.

69. A 1979 General Accounting Office study found that no state systematically made independent actuarial reviews of the statistical relationship upon which classifications were based. GAO REP., *supra* note 5, at 130. State court cases reviewing the work of state insurance commissioners rarely discuss standards for classification review at all. Wortham, *supra* note 1, at 373, 387-92. For one case overturning a state insurance commissioner's rejection of a classification without any actuarial data in the record, see Wortham, *supra* note 1, at 373 n.122.

70. Benston I, *supra* note 11, at 501, identifies these three criteria although he uses slightly different terms. Kimball, *supra* note 15, at 108, discusses stability and practicality of use in addition to statistical significance. See K. ABRAHAM, *supra* note 15, at 71, 78 ("Information about risk is accumulated and risk classes are refined only so long as the competitive benefits of refinement are worth their cost." *Id.* at 78).

71. Later I dispute Benston's contention that there is an efficiency gain every time a classifier can be found for which benefits to a subgroup exceed administrative costs. See *infra* notes 364-69 and accompanying text. Abraham says only that there would be no competitive incentive for an insurer to use a classification if benefits to a subgroup did not exceed expected costs. K. ABRAHAM, *supra* note 15, at 78. One exception to that generally accurate statement might be if a classification attracted new customers with considerable premiums so that investment income on those premiums generated a profit level exceeding the administrative cost of classification. See *infra* notes 243-46 and accompanying text.

72. THE ROLE OF RISK CLASSIFICATION IN PROPERTY AND CASUALTY INSURANCE: A STUDY OF THE RISK ASSESSMENT PROCESS AT 49 [hereinafter cited as SRI REP.], *reprinted in* NAIC ADVISORY COMM. REP., *supra* note 16, at 127.

73. GAO REP., *supra* note 5, at 118.

The point here is that classifications, as used, vary somewhat from the accurate predictors of risk based on perfect information of theoretical models. Much is unknown about determination of risk. Even classifiers that may be accurate predictors may be abandoned for other reasons. As will be suggested later, some classifications also might be termed a device for oligopolist producers to segment the market and practice price discrimination in order to extract maximum prices from consumers.⁷⁴

D. The Personal Lines of Insurance

This Article focuses on the kinds of insurance needed most often by individuals for personal use: automobile, homeowner's or renter's, health, disability, and life. Factors in the market for commercial insurance are somewhat different. The assertion that risk classification allows comparison of loss prevention cost to insurance cost is more likely to hold true for managers buying insurance for their enterprises than for an individual buying automobile or health insurance.⁷⁵

The insurance industry generally is divided into two fields: property/liability and life/health/disability. As will be described later, state regulation schemes follow different patterns for property/liability insurance than for life/health/disability.

Some property/liability companies write commercial damage and liability insurance as well as policies for individuals. Others limit themselves to one or the other type of customers. Automobile and homeowner's or renter's insurance are the main property/liability coverages purchased by individuals. Individuals and families are those insured under life, health, and disability policies, but businesses or nonprofit groups become involved by contracting with insurers to provide such insurance for employees as a fringe benefit.

Automobile and homeowner's or renter's insurance are packages of specific coverages.⁷⁶ Most of the coverages either compensate for damage to one's own property from a variety of causes or promise to provide a defense and indemnify against loss if a third party seeks compensation from the insured. For damage to one's own property, insureds usually have a choice of deductibles, an amount the insured must pay before the insurer starts to pay. The lower the deductible the more expensive the policy premium. A consumer magazine recently reported premium savings of more than twenty-five percent in homeowner's insurance for deductibles of \$250 or \$500 rather than \$100.⁷⁷

A major choice in life insurance purchasing is between term and whole life insurance.⁷⁸ In term, the premium is based only on the actuarial calculation of life expectancy and thus increases as the insured gets older.⁷⁹ In whole life, the premium

74. See *infra* notes 260–64 and accompanying text.

75. See *infra* note 352 and accompanying text.

76. See F. CRANE, *supra* note 58, at 74–104, for background on common coverages in automobile insurance. Homeowner's coverage is another package. It typically covers fire, theft of contents, liability for a variety of natural hazards, and liability for the claims of others. *Id.* at 159–93.

77. *Homeowner's Insurance*, CONSUMER REFS., Aug. 1985, 473, 482 [hereinafter cited as *Homeowner's Insurance*].

78. F. CRANE, *supra* note 58, at 223–30.

79. *Id.* at 225.

structure is set by the initial contract and usually remains the same over the life of the policy.⁸⁰ Premiums in the first years are much higher for whole life insurance than term because a portion of the premium is invested to cover the increased cost of premiums in later years. Whole life policies generally have a "cash value," an amount that will be paid to insureds if they cash in the policy, and a "loan value," an amount that can be borrowed against the policy.

Almost all insurance sold through individual contracts is marketed by one of three basic methods: the exclusive agency system, the independent agency system, and direct selling.⁸¹ In the exclusive agency system, agents sell products for only one company.⁸² This sales method is common in life insurance.⁸³ In the last two decades, the exclusive agency system has made tremendous gains in property/casualty insurance over the previously dominant independent agency system.⁸⁴ The two largest automobile insurers, State Farm and Allstate, and other well-known companies such as Government Employees Insurance Company (GEICO) and Nationwide, rely on the exclusive agency system.⁸⁵ These and other companies grew by offering lower premiums, made possible in large part by an expense advantage⁸⁶ and selective underwriting.⁸⁷ The commission structure for exclusive agents in property/casualty insurance is somewhat lower than for life insurance agents.⁸⁸

Independent agents represent several insurance companies.⁸⁹ They have property rights in the expirations of policies they sell,⁹⁰ and these rights can be sold or transferred.⁹¹ Agents can switch expiring policies between companies.⁹²

Direct selling refers to marketing directly by an insurance company without agents.⁹³ Policies are either sold by mail or by salaried company employees.⁹⁴ The distinction between direct selling and exclusive agency is somewhat blurred in property/casualty insurance because exclusive agency companies are often referred to

80. *Id.* at 228-29.

81. *Id.* at 372.

82. *Id.*

83. *Id.* at 372-73.

84. *Id.* at 375. According to Crane, exclusive agency insurers wrote 20% of automobile insurance in 1953 but about 50% of such insurance at the time of his book's publication in 1984. He says there has been a similar, although smaller, growth in the percentage of homeowner's insurance written by exclusive agency companies.

85. *Id.*

86. *Id.* at 376-77. He attributes success to four factors: 1) concentration on personal lines that lend themselves to mass production rather than commercial insurance that requires a greater variety of coverage and more tailoring to individual risks; 2) efficient administrative methods; 3) emphasis on new sales, *see infra* note 90 and accompanying text; and 4) national brand name advertising.

87. D. CUMMINS & S. WEISBART, *THE IMPACT OF CONSUMER SERVICES ON INDEPENDENT INSURANCE AGENCY PERFORMANCE* 1 (1977), say the operations of direct writers "have been characterized by low prices, stringent underwriting standards, efficient administrative procedures, and, in some cases, restrictive claims settlement policies." Joskow, *Cartels, Competition and Regulation in the Property-Liability Insurance Industry*, 4 BELL J. ECON. & MGT. SCIENCE 375, 405 (1973) comments on the segmenting of the insurance market with direct writers competing only for the "cream" of the risks.

88. F. CRANE, *supra* note 58, at 377, says Allstate agents generally receive 15% of the premium for new property-casualty business and 6.5% for renewals. *See infra* notes 255-56 and accompanying text on commission structures in life insurance that range from 25% to 130% of the first year's premiums.

89. *Id.* at 374-75.

90. *Id.*

91. *Id.*

92. *Id.*

93. *Id.* at 377.

94. *Id.*

as direct writers.⁹⁵ Part of the expense advantage that spurred the growth of the property/casualty direct writers resulted from computerized central company offices that handled policy writing, premium collection, and recordkeeping rather than using agents to perform these tasks.⁹⁶

While almost all automobile or homeowner's and more than half of the life insurance in force is sold individually, at least eighty-five percent of health and disability insurance policies are issued through groups, primarily employer-sponsored plans.⁹⁷ The insurer sells one master policy to the employer, who then offers coverage to employees.⁹⁸ Employers or employees may pay the full cost of coverage or there may be some sharing of the cost.⁹⁹ Generally group health policies charge the same rate to all group members, the only difference being whether one chooses an individual or family policy.¹⁰⁰

The specifics of group health and disability coverage usually are negotiated by the employer with the insurer. Employees may be involved in the design of coverage from a particular company through unions or other representatives, but at the point of purchase, individuals often do not have much choice among coverage options within an individual plan. Larger employers may offer several plans with different packages of options.

Health and disability insurance can be purchased individually, but the coverage available may be less desirable and usually is more expensive than group coverage.¹⁰¹ As discussed later, the greater use of classification in such individual policies than in groups may create a problem in getting such coverage at all.¹⁰²

For individual as opposed to group contracts, classification usually comes into play in choosing whether to write the insurance at all, the rate to charge, and what coverages to offer. Classifications commonly used in automobile insurance include gender, age (usually over and under 25), marital status, driving record, zip code where the car is garaged, use of the auto, and make and model of the car.¹⁰³ Some companies have included occupation and personal living habits as underwriting classifications.¹⁰⁴ Homeowner's classifications often include material from which the house is constructed, proximity to a fire station, various safety devices, and zip code of residence.¹⁰⁵ For life insurance, a physical examination and extensive history on health and personal habits usually are required.¹⁰⁶ Health related classifications (e.g.,

95. *Id.*

96. *Id.*

97. *Senate Hearings on S. 372*, 98th Cong., *supra* note 1, at 303-08 (testimony of the President of the American Academy of Actuaries that 85% of private hospital and medical insurance for people under 65 is sold through groups). F. CRANE, *supra* note 58, at 290 states that over 85% of health and over 45% of life insurance is group coverage.

98. F. CRANE, *supra* note 58, at 290.

99. *Id.*

100. *Id.* at 294-95.

101. *Id.* For a listing of reasons that group insurance costs less, see *id.* at 291-92.

102. See *infra* notes 106-07 and accompanying text.

103. F. CRANE, *supra* note 58, at 136-44.

104. *Senate Oversight Hearings on Discrimination in Property and Casualty Ins.*, 95th Cong., *supra* note 5, at 89-92 (property/casualty insurance); R. KESSLER, *THE LIFE INSURANCE GAME* 127-53 (1985) (life insurance).

105. *Homeowner's Insurance*, *supra* note 77, at 476-77, 482 (neighborhood and safety devices).

106. R. KESSLER, *supra* note 104, at 127-53, describes the personal background checks made on about two million insurance applicants a year by Equifax in Atlanta, Georgia. Inquiries to neighbors and others may include the relationship

blood pressure, medical history) as well as age, gender, and marital status are taken into account. In individual health/disability policies, extensive questioning on health history is likely to be taken and factored in, along with occupation, gender, and age.¹⁰⁷

In contrast, for most health/disability policies sold through groups, classification plays a much more limited role. Generally the insurer promises to insure everyone within the group at a fixed price differing only for individual versus family coverage.¹⁰⁸ Certain kinds of benefits, for example, cosmetic surgery, may be denied all members of the group, but restrictions on preexisting illnesses are usually the only major way in which distinctions among group members are made.¹⁰⁹

As previously described, classification plays an important role in determining who can be insured and what people will have to pay for their insurance coverage. The following briefly describes the minimal ways in which insurer's discretion to classify is limited currently and major proposals for changes that have been made.

To the degree insurance is regulated at all, it generally is regulated by the states rather than the federal government. Until 1944, insurance had been held by the United States Supreme Court not to be interstate commerce, and thus it was thought not susceptible to federal regulation.¹¹⁰ In *United States v. South-Eastern Underwriters*, the Supreme Court reversed its position on the relationship of insurance to interstate commerce and made it clear that insurance could be regulated by federal statute.¹¹¹ In response, Congress passed the McCarran-Ferguson Act, providing that federal laws should not be "construed to invalidate, impair, or supersede" any state law regulating insurance unless the federal statute explicitly states its application to insurance.¹¹²

of nonfamily members living with the applicant, lifestyle, condition of the home, drinking, general reputation, and, in some instances, "home life." *Id.* at 134-35. Insurance executives interviewed by Kessler claimed such information was not relevant to underwriting decisions, but an Equifax executive said it would not be collected unless insurers wanted it. *Id.* at 136.

107. S. HUEBNER & K. BLACK, JR., *LIFE INSURANCE* 537-43 (8th ed. 1972). In addition, this insurance text suggests that applicants voluntarily approaching the company should be suspect as moral hazard risks because there is a better than average chance the applicant knows of a reason he is likely to need the insurance. *Id.* at 541.

108. S. KIMBALL & H. DENENBERG, *MASS MARKETING OF PROPERTY AND LIABILITY INSURANCE* 83 n.141 (1970); F. CRANE, *supra* note 58, at 294-95. Some preexisting illness restrictions may apply. *Id.* at 207.

109. F. CRANE, *supra* note 58, at 207, 294-95. The Supreme Court refused to hold plans treating pregnancy differently from other temporary disabilities in violation of the equal protection clause in *Geduldig v. Aiello*, 417 U.S. 484 (1974), and of Title VII of the Civil Rights Act of 1964 in *General Electric Co. v. Gilbert*, 429 U.S. 125 (1972). In response, Congress amended Title VII to define sex discrimination to include differential treatment on the basis of pregnancy. Pregnancy Discrimination Act of 1978, Pub. L. No. 95-555, 92 Stat. 2076 (codified at 42 U.S.C. § 2003(k) (1982)).

110. *Paul v. Virginia*, 75 U.S. (8 Wall.) 168 (1868) first so held. J.G. DAY, *ECONOMIC REGULATION OF INSURANCE IN THE UNITED STATES* 16 n.44 (1970) reports that the Court had so held seven times by 1901. Noted insurance scholar Edwin Patterson pointed out in *The Future of State Supervision of Insurance*, 23 TEX. L. REV. 18 (1944) that all previous cases dealt with whether state legislation was within a state's power or gave rise to a conflict between federal and state statutes. *Id.* at 19.

Nehemkis, *Paul v. Virginia: The Need for Re-examination*, 27 GEO. L.J. 519 (1939) shows *Paul* to be a test case devised by the insurance industry in an attempt to curb state regulation, which was thought to be too aggressive, and pave the way for a federal scheme that might be more lenient. For other attempts by the industry in the late 1800s and early 1900s to substitute federal for state regulation, see Rose, *State Regulation of Property and Casualty Insurance Rates*, 28 OHIO ST. L.J. 669, 670-74 (1967).

111. 322 U.S. 533 (1944).

112. 15 U.S.C. §§ 1011-1015, 1012(b) (1982).

The federal government has not legislated to restrict insurers' discretion to classify although there have been proposals to do so.¹¹³ Two Supreme Court cases have construed Title VII of the Civil Rights Act of 1964 to prohibit classification on the basis of race, color, sex, religion, or national origin in any employer-sponsored insurance plan.¹¹⁴

All states have prohibitions on "unfair discrimination" in rating insurance.¹¹⁵ Many extend such prohibitions to underwriting, but, unlike rating schemes, underwriting guidelines usually are not required to be submitted to state regulators.¹¹⁶ Such unfair discrimination statutes have been construed only to require that there be a statistical difference in the average loss between groups for any classification used.¹¹⁷ Elsewhere I have reviewed case law under such statutes to refute the argument that such statutes require or urge refined classification.¹¹⁸

As the Introduction describes, controversy over classification usually arises because a group of people challenge their insurance denial or higher rates in particular lines of insurance. Most of the challenges to use of particular classifications and the legislative remedies have been framed in antidiscrimination terms borrowed from civil rights law.¹¹⁹ I have argued elsewhere that the antidiscrimination perspective, while a valid concern for a few classifications, does not offer an adequate framework for thinking about classification generally and deflects attention from developing such a framework.¹²⁰ Not only the public debate but the academic commentary has focused on particular classifications in specific lines of insurance¹²¹ and in doing so has avoided more basic questions about the insurance market and how well existing structures work to deliver insurance coverage.

113. See *supra* notes 1, 3, 7 and accompanying text.

114. See *supra* note 1. For a review of the generally unsuccessful challenges to classifications under other civil rights laws, see Wortham, *supra* note 1, at 362-64 nn.53-58.

115. Wortham, *supra* note 1, at 382 n.174. State rate regulation schemes "governing property and casualty insurance, including homeowner's and automobile insurance, usually include a general standard that rates 'not be excessive, inadequate or unfairly discriminatory.'" *Id.* at 382 n.175. "Often, an additional statute prohibits unfair discrimination 'between insureds or property having like insuring or risk characteristics . . . or other such language.'" *Id.* at 382 n.176. States generally do not have comparable rate authority in life, health, and disability. *Id.* at 382 n.179. "A common formulation in unfair discrimination statutes governing these lines prohibits 'discrimination between individuals of the same class and equal expectation of life' as part of unfair trade practice codes governing insurance." *Id.* at 382-83 n.180.

116. Wortham, *supra* note 1, at 372 n.118 and accompanying text.

117. *Id.* at 372 nn.115-16. A few state insurance commissioners have ruled that unfair discrimination statutes require more. Wortham, *supra* note 1, at 378-79. In a case on gender classification in automobile insurance, the Pennsylvania Supreme Court recently agreed with the Insurance Commissioner that the unfair discrimination statutes encompassed a concern for more than statistical association with loss. *Hartford Accident & Indem. Co. v. Insurance Comm'r*, 505 Pa. 571, 482 A.2d 542 (1984). *Contra* *Dep't of Ins. v. Ins. Servs. Office*, 434 So. 2d 908 (Fla. Dist. Ct. App. 1983), *petition denied*, 444 So. 2d 416 (Fla. 1984).

118. Wortham, *supra* note 1, at 387-93.

119. See *supra* notes 1, 7 and accompanying text; Wortham, *supra* note 1, at 360-70.

120. Wortham, *supra* note 1, at 408-14 and accompanying text.

121. In addition to the articles cited in *supra* note 15, two other articles take a more general conceptual approach to classification questions. Austin, *supra* note 66, (Critical Legal Studies perspective on classification) and Underwood, *Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment*, 88 YALE L.J. 1408 (1979) (considering insurance classification as one example of legitimacy of public decisions resting on statistical prediction).

E. Insurance is Essential

Before moving to the survey of economic analyses of classification, a critique of them, a suggested alternative approach, and some public policy recommendations, let me state explicitly one belief that drives my interest in insurance in general and classification in particular, and that influences the nature of reforms I propose. Insurance is essential in a way different from most other privately provided goods and services. Accordingly exploration of alternative mechanisms for its delivery are vitally important to the society.¹²²

In many situations, insurance is a prerequisite to adequate health care.¹²³ Families need protection from the death and disability of breadwinners. Houses and cars are not financed without insurance.¹²⁴

There is strong social pressure to compensate the innocent victims of accidents. More than half of the states require liability coverage or some other approved form of security before a car can be registered.¹²⁵ Such laws attempt to deal with the destructive capacity of the automobile, although the limits required are generally too low to compensate victims of serious automobile accidents fully.¹²⁶

To address availability issues, some residual markets have been created by statute. Most states have some form of assigned risk pool to provide at least limited automobile insurance coverage to those refused by the private market, although the cost may be considerably higher.¹²⁷

In the wake of the 1968 riots, much attention focused on the unavailability of insurance in inner city neighborhoods.¹²⁸ In response, Congress passed the Urban Property Protection and Riot Reinsurance Act of 1968 giving states an incentive through availability of riot reinsurance to state insurers to set up FAIR plans, a kind of assigned risk pool for property insurance.¹²⁹ Although this Act has lapsed, many states retain a FAIR plan arrangement.¹³⁰ Like assigned risk automobile insurance,

122. I made the argument for the essential nature of insurance at greater length in Wortham, *supra* note 1, at 393-402.

123. For examples and discussion, see *When the Patient Can't Pay the Medical Bill*, Bus. Wk., Feb. 18, 1985, 59-62. As indicated in the article, the situation has worsened because hospitals are less willing to redistribute the cost of care to other patients whose bills are being paid by the government or private insurance. This has come about because of federal health cost cutting and insurers competing to lower costs. *Id.*; Ailing, *Uninsured and Turned Away*, Wash. Post, Mar. 30, 1985, at A1, col. 1; Colburn *Bill Would Aid Millions Without Health Coverage*, Wash. Post/Health, July 2, 1986, at 7, col. 3.

124. Lenders require fire coverage before making a home loan. *Dunn v. Midwestern Indem. Mid-Am. Fire and Casualty Co.*, 472 F. Supp. 1106, 1111 (S.D. Ohio 1979); HUGHES PANEL REP., *supra* note 8, at 1.

125. INSURANCE INFORMATION INSTITUTE, *INSURANCE FACTS* 94 (1983-84 ed.) lists thirty-one states.

126. Of the thirty-one states requiring all registered car owners to have liability insurance or some other approved form of security, a 1983-84 industry publication shows no state to require more than \$25,000 coverage for an individual and only one state requires more than \$50,000 total coverage for an accident. *Id.* at 95.

127. Three alternative methods have been used: assigned risk plans, reinsurance facilities, and joint underwriting associations. See Austin, *supra* note 66, at 522 n.23, for a description of each. According to a 1974 Federal Insurance Administration study, rates in such plans averaged 45% higher than rates for similar drivers in the voluntary market. U.S. DEP'T OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION, *FULL INSURANCE AVAILABILITY* 1-3 (1974) [hereinafter cited as FIA].

128. A presidential commission on the subject was formed and chaired by New Jersey Governor Hughes. HUGHES PANEL REP., *supra* note 8, at ii, v.

129. 12 U.S.C. §§ 1749bbb-3 to 1749bbb-10 (1982). FAIR is an acronym for "fair access to insurance requirements." 12 U.S.C. § 1749bbb-3(a) (1982).

130. The riot reinsurance program expired on November 30, 1985. Pub. L. No. 98-181, Title IV, §§ 452(b)(1), 97

the coverages available may be more restricted and the cost higher than the private market.¹³¹

A few states have assigned risk arrangements for individual health insurance, but such plans are not nearly so widespread as in automobile and property insurance.¹³² Of course, many Americans, for example, poor people eligible for Medicaid, elderly people eligible for Medicare, veterans, and Native Americans, participate in publicly-sponsored health care programs.¹³³ The House Ways and Means Committee recently approved a proposal to require states to create insurance pools to sell health insurance to people who are not covered at a cost no more than 150 percent of the market rate for individual health insurance. The proposal also would broaden eligibility for Medicaid.¹³⁴ There are generally no guarantees of access to any coverage in life or disability insurance.

Although liability insurance outside the personal lines is beyond the scope of this Article, there is a real fear that day care centers will close, doctors will cease to deliver babies, manufacturers will cease to make vaccines, corporate directors will refuse to serve, and so forth if insurance cannot be obtained at a rate judged affordable.¹³⁵

III. ECONOMIC ANALYSES OF INSURANCE CLASSIFICATION

Much public debate on classification regulation has been nothing more than quasi-economic sloganeering of the market-is-good, regulation-is-bad variety.¹³⁶ Even some of the law and economics commentary is phrased as simple faith in the "invisible hand" without supporting analysis.¹³⁷ The following inventories the more substantive statements about the economics of classification made in law review and other public policy journal writings that have purported to shed light on what should be the law of classification.¹³⁸

Economists usually distinguish between "positive" and "normative" analysis.¹³⁹ Positive work seeks to describe and explain why certain behavior takes place

Stat. 1230, 12 U.S.C.A. § 1749bbb(b)(1) (West 1984 Supp.). Robert Hunter, former Deputy Federal Insurance Administrator and now Director of the National Insurance Consumer Organization, estimates that half the states still have such programs. Telephone interview with Robert Hunter, Feb. 22, 1985, cited in Wortham, *supra* note 1, at 396 n. 276.

131. U.S. DEP'T OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION, *INSURANCE CRISIS IN URBAN AMERICA* 20-22 (1978).

132. Wortham, *supra* note 1, at 398-99 nn.292-93.

133. For an inventory of statutes providing health insurance or care to subgroups in the population, see Wortham, *supra* note 1, at 352 n.14.

134. Rich, *Hill Panels Seek to Improve Health Care for Poor*, Wash. Post, Aug. 5, 1986, at A13, col. 2.

135. For a survey of entities hit by the current property/liability "crisis," see *Business Struggling to Adapt as Insurance Crisis Spirals*, Wall St. J., Jan. 31, 1986, at 21, col. 1.

136. Herbert Denenberg, former insurance professor and Pennsylvania Insurance Commissioner, has characterized insurers' positions on regulatory proposals as follows: "When they talk about competition, they're usually talking about some anticompetitive measure. When they talk about competition, they're usually talking about their right to do what they want to do, in terms of setting rates." *House Hearings on Competition*, 98th Cong., *supra* note 6, at 259.

137. "[C]ompetition among producers usually results in the optimal use of production procedures and factors. But if constraints are placed on the insurers that prohibit them from using the optimal mix of productive factors, the insureds will be disadvantaged." *Benston I*, *supra* note 11, at 498.

138. See *supra* note 15 and accompanying text.

139. See, e.g., C. GOETZ, *supra* note 44, at 2.

and to predict what will happen in given circumstances.¹⁴⁰ The term “positive” also may describe testing theory against empirical data to assess its explanatory power. In contrast, normative economics views more efficient states of the world as being more desirable and makes statements about what *should* be.¹⁴¹

The following inventory of assertions about the economics of classification begins with positive analyses and moves to normative ones. The third subpart describes an argument that is neither positive nor negative but rather a suggestion that terms borrowed from economic theory be used in the legal definition of discrimination with regard to insurance.

These analyses, like most economics, depend on simplifying assumptions.¹⁴² Much of Part IV questions whether the assumptions upon which the neoclassical model of a competitive market is based are realistic for the insurance market, as well as whether actual insurance buying behavior varies from the predictions of economic utility theory. Parts IV and V outline conclusions and public policy implications that should flow from economic analyses of classification when such gaps are taken into account.

A. Positive Predictions

Arguments about how the law should treat classification regulation have included predictions about consequences that might flow from its restriction. Four predictions are made about the consequences of restricting the use of classifications that insurers otherwise would choose.¹⁴³

A first positive argument, made by Professor Benston in two law review articles, terms insurance a zero-sum game.¹⁴⁴ He so concludes by saying that all premiums and investment income, less administrative costs and contingency reserves, go to policyholders.¹⁴⁵ Thus, Professor Benston predicts that for one insured to pay less, another necessarily must pay more. He does not examine the level of administrative expenses and contingency reserves in insurance. His conclusions and general

140. *Id.*

141. *Id.* At this point, there is no need to discuss the varying definitions of efficiency. For description of four definitions of efficiency, see Coleman, *Efficiency, Utility, and Wealth Maximization*, 8 *HOFSTRA L. REV.* 509, 512–20 (1980). Some differences in definition are discussed herein *infra* notes 364–69 and accompanying text.

142. See A.M. POLINSKY, *supra* note 43, at 2–5, on the role of assumptions in economics.

143. Two additional positive economic arguments were made in briefs and by commentators leading up to the *Manhart* and *Norris* decisions. For citations to *Manhart* briefs and pleadings in related cases, see numerous references in Key, *supra* note 15. For comment, see Benston I, *supra* note 11, at 532–41. The first was that prohibiting the use of sex as a classifier in employer-sponsored pension plans would hurt women in the employment market because insuring women then would cost more. If employers had to absorb the cost, they would have an incentive not to hire women, and if employees were to absorb the cost by redistribution, men would not want to work in primarily female groups. Benston I, *supra* note 11, at 532–36.

The second argument was that prohibiting the use of sex as the classifier in annuity plans would cause men to opt for a cash option rather than staying in annuity plans and result in annuity plans being primarily female groups. Benston I, *supra* note 11, at 535–36. These arguments are not discussed in this Article because they concern more the effect on the labor market for women than a general point about refined classification. They also have been critiqued extensively elsewhere as an oversimplification of the motivations of people and as ignoring other significant economic incentives. Key, *supra* note 15, at 17–25.

144. See *supra* note 15.

145. Benston II, *supra* note 11, at 273.

statements about the workings of the market assume that competition will keep such costs to the minimum level.¹⁴⁶ Insurers' arguments to legislators considering classification restriction have been stated similarly.¹⁴⁷

A second positive analysis can be taken from Professor Abraham's stress on classification's potential effect on the overall cost of losses.¹⁴⁸ The logic is that if insurance is too cheap for people of higher risk then they will not have incentives to protect against losses, reduce or forgo activities that would result in losses, or reduce costs of losses.¹⁴⁹ For example, if safety measures in one's home are not rewarded with lower rates, one will not have incentives to make expenditures for installing burglar or smoke alarms. If risky drivers do not pay according to their actual risk, they will be encouraged to purchase an additional car, and parents will not be deterred from putting their risky teenagers behind the wheel.

Another positive prediction is that restricting classification discretion will result in reduced insurance availability. If classification in rating is restricted, so that insurers are required to insure broader classes of people at the same price than they otherwise would do, insurers will refuse to write insurance for those they view as higher risks.¹⁵⁰ Then, rather than having to pay higher premiums, people perceived as less desirable risks by the insurance industry will not be insured at all. It is predicted further that if underwriting discretion is limited, insurers will still try to write the best risks by directing their marketing efforts to those people they perceive to be so.¹⁵¹

Most of the work on classification, published in economics journals, has dealt with a fourth set of theoretical predictions that barely have been acknowledged in the legal literature.¹⁵² This body of theory, growing from the work of economists Rothschild, Stiglitz, and Wilson, focuses on the effects of adverse selection.¹⁵³ This body of theory will be referred to here as "market instability" theory. Their theoretical models have been cited to suggest that if government restricts classifica-

146. *Id.* See the passages quoted in *supra* notes 11 and 137.

147. *E.g.*, *Senate Hearings on S. 372*, 98th Cong., *supra* note 1, at 301 (testimony of Barbara Lautzenheiser, Senior Vice President of Phoenix Mutual Life Insurance Co.). See the quote from a former Member of Congress in *supra* note 6.

148. K. ABRAHAM, *supra* note 15 and accompanying text.

149. K. ABRAHAM, *supra* note 15, at 65-66, 71-74, 77-81 (discussion in normative terms).

150. K. ABRAHAM, *supra* note 15, at 96-98. Works, *supra* note 15, at 458 (1977), comments on the tendency to restrict underwriting when rate regulation is perceived to keep rates too low. The President of the American Alliance of Insurers predicts this result in NAIC ADVISORY COMM. REP., *supra* note 16, at 16. See COMPETITION AND REGULATION IN THE PROPERTY/CASUALTY INSURANCE INDUSTRY, A REPORT OF THE ECONOMIC ADVISORY PANEL TO THE NATIONAL COMMISSION FOR THE REVIEW OF ANTITRUST LAWS AND PROCEDURES reprinted in SENATE HEARINGS ON S. 2474, *supra* note 8, at 119, at 142 [hereinafter cited as JOSKOW REP.] (similar prediction).

151. The President of the American Alliance of Insurers has predicted this result. See NAIC ADVISORY COMM. REP., *supra* note 16, at 16.

152. K. ABRAHAM, *supra* note 15, at 81, cites Rothschild and Stiglitz to say that they have shown in theoretical terms that the problem of distinguishing high-risk and low-risk insureds may make competitive equilibrium impossible.

153. Formal presentations of this view are developed by Rothschild & Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q. J. ECON. 629 (1976); Wilson, *A Model of Insurance Markets with Incomplete Information*, 16 J. ECON. THEORY 16 (1977). A nonmathematical intuitive description of this theory can be found in D. CUMMINS, *supra* note 15, at 27-62 (1983). The theory appears as the sole economic rationale for risk classification identified by the four authors of the Cummins' group's book.

tion there may be no equilibrium set of profitable contracts that can be offered.¹⁵⁴ In this context, equilibrium refers to a state where insurers have no incentives to change the terms of policy offers or withdraw old offers, and consumers have no incentives to switch policies.¹⁵⁵ If no equilibrium exists, policies constantly will be withdrawn, the market unstable, and availability of coverage restricted.¹⁵⁶ This positive argument assumes that underwriting as well as rating discretion are restricted, and so differs from the previously stated prediction about unavailability resulting from selective underwriting. Under this analysis, availability gaps would arise because the purchase of a particular contract by too many high-loss-probability-insureds would render the policy unprofitable such that it is withdrawn by the insurer.

This work on market instability presumes different demand curves for high-loss-probability-insureds (HLPs) and low-loss-probability-insureds (LLPs), with HLPs willing to buy more insurance and pay more for the same quantity of insurance than LLPs.¹⁵⁷ This assumes demand is determined by an insured's perception of his riskiness as predicted by expected utility theory. A competitive insurance market with no costs of administration also is assumed.¹⁵⁸

The market instability work predicts that with perfect information about the riskiness of insureds and a corresponding classification system, all consumers will be able to buy policies at an actuarially fair premium, that is, a premium equal to expected value, with minimum loading for administrative costs and residual risk.¹⁵⁹ This will occur because if any group of insureds is charged more than such a rate, a competing insurer will enter the market and offer coverage at a lower price such that prices are eventually driven down to the actuarially fair level.¹⁶⁰

This work considers what will happen if there is imperfect information because firms are forbidden to classify or have inadequate information to classify. Three potential market responses are posited: 1) a pooling equilibrium where an average rate between the rate for HLPs and LLPs is charged;¹⁶¹ 2) a separating equilibrium where insurers offer high-rate-full-coverage policies favored by HLPs and partial coverage at a lower price favored by LLPs in order to induce a self-selection;¹⁶² or 3) if firms can anticipate the behavior of other firms, a set of contracts that will break even on average, with LLPs subsidizing HLPs.¹⁶³

This theoretical work rejects the pooling equilibrium as a long run possibility by reasoning that LLPs will not buy policies at pooled rates.¹⁶⁴ Through adverse selection, LLPs will move from the policy with the pooled rate (Policy A) to a

154. D. CUMMINS, *supra* note 15, at 27.

155. *Id.* at 34-35.

156. This should be distinguished from the previously stated argument, *supra* notes 150-51 and accompanying text, that constricted availability will result because insurers restrict coverage through underwriting by attempting to select the best risks if forced to charge the same rate to people they otherwise would rate separately.

157. D. CUMMINS, *supra* note 15, at 27-30.

158. *Id.* at 31-32.

159. *Id.* at 34-35.

160. *Id.*

161. *Id.* at 35-38.

162. *Id.* at 38-43.

163. *Id.* at 43-48.

164. *Id.* at 36-38.

cheaper policy offered by a competitor that provides less coverage (Policy B).¹⁶⁵ HLPs will stay with the greater coverage (Policy A).¹⁶⁶ The firm offering Policy A then will find itself with a disproportionate number of HLPs and will be compelled by the economic realities to withdraw the policy.¹⁶⁷

Nash posits a separating equilibrium in which two policies are offered in order to induce insureds to self-select.¹⁶⁸ He predicts that HLPs will buy full coverage at a high unit price (Policy C) while LLPs will buy a lower-priced policy offering partial coverage (Policy D), even though LLPs would have preferred a full coverage policy if the price had been lower.¹⁶⁹

The two previous outcomes assume that insurers cannot act with foresight, that is, cannot anticipate the behavior of other insurers.¹⁷⁰ Wilson, with extensions from Miyazaki and Spence, adds two additional assumptions to come up with a third type of equilibrium called a Wilson subsidizing equilibrium.¹⁷¹ This subsidizing equilibrium is deemed possible if insurers can predict their competitors' behavior and achieve a stable equilibrium by offering sets of contracts that break even on average although not individually.¹⁷² With this equilibrium, a small amount of coverage will be offered at a pooled rate with LLPs subsidizing HLPs.¹⁷³ Supplementary policies then are offered at different rates to induce HLPs and LLPs to self-select.¹⁷⁴ The set of policies represented by the small pooled policy and the separating supplementary policies breaks even on average and competitors foresee that no other policy offers will improve their position.¹⁷⁵

The market instability work predicts that the pooling equilibrium will fail.¹⁷⁶ The separating equilibrium or the Wilson subsidizing equilibrium might be achieved, but they would represent a welfare loss over refined classification with perfect information.¹⁷⁷ That is true because, although HLPs would be as well off as a classification with perfect information, LLPs would be worse off.¹⁷⁸ Thus, there would be no welfare gain.

Regulation could require everyone to buy full coverage at the pooled rate or enforce the Wilson subsidizing equilibrium.¹⁷⁹ This improves the welfare of both HLPs and LLPs over market failure, but is not superior for LLPs to classification with perfect information.¹⁸⁰

165. *Id.*

166. *Id.*

167. *Id.*

168. *Id.* at 38-43.

169. *Id.*

170. *Id.*

171. *Id.* at 43-48.

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.*

176. *Id.* at 36-37.

177. *Id.* at 49, 60.

178. *Id.* at 46-51.

179. *Id.* at 60.

180. *Id.*

B. Normative Conclusions

As already noted, positive argument predicts that broad pooling will not offer incentives to control loss, but does not make any judgment on whether that is a desirable outcome. Normative argument, on the other hand, contends that refined classification is *desirable* because it produces incentives for loss control.¹⁸¹

A second normative argument is Professor Benston's assertion that there is an efficiency gain whenever a classification lowers premiums by more than the increased administrative costs of using the classification.¹⁸² All other things being equal, a change resulting in an efficiency gain is seen as desirable.

A third normative justification for classification based in classical economic argument is:¹⁸³ 1) The most efficient allocation of resources is achieved when the price for products equals their marginal cost. 2) Marginal cost for the insurance product is the expected loss of the insured plus variable costs. 3) The competitive market will keep costs to a minimum. 4) Therefore, the most efficient allocation of resources is achieved when insureds are charged in accordance with expected loss.

Neoclassical economic theory concludes that pricing at marginal cost gives the most efficient allocation of resources because people are not encouraged to purchase less desirable substitutes for a good on account of a distortion in price. For example, if freight trains are subsidized below the cost of shipping by truck and a product could be shipped on either, shippers will choose railroads although they might otherwise not prefer it. The society will be devoting more resources to train transportation than are really desired by individual consumers. The railroad industry is not encouraged to operate as efficiently as possible because subsidy keeps its price artificially low. Meanwhile, the more efficient trucking industry is not able to develop fully.

In the insurance case, pricing at marginal cost theoretically allows comparison of the cost of insurance to the cost of loss prevention.¹⁸⁴ Insurance would not be overpriced, thus encouraging excessive resources to be devoted to loss control or saving for contingencies.¹⁸⁵ Insurance would not be underpriced such that a moral hazard problem would arise, encouraging insureds to overinsure and be lax in taking care.¹⁸⁶ Expected utility theory posits that insureds will want to purchase the optimal

181. Kenneth Abraham makes the clearest statement of this rationale in the legal literature. K. ABRAHAM, *supra* note 15. He explains not only how loss control incentives relate to taking steps to avoid losses but also to giving incentives to forego activities. *Id.* at 65–66, 71–74, and 77–81.

A study conducted by the Stanford Research Institute for some insurer trade associations gives as the rationale for "economically optimal allocation of resources" through risk assessment that it provides the correct economic incentives for loss reduction. SRI REP., *supra* note 72, at 127.

182. Benston I, *supra* note 11, at 496–501. K. ABRAHAM, *supra* note 15, at 77–79, correctly says that it would not be efficient to use a classifier for which expected costs exceed benefits to some subgroup, but he does not assert that insurers make this judgment on each classifier or that there necessarily would be an efficiency gain if the condition were met.

183. A general statement by Kemp, *supra* note 15, at 572–75, outlines a similar argument to demonstrate its inapplicability to the insurance market. See *supra* note 16 for an industry group's assertion that pricing at expected loss is a "fundamental economic principle." K. ABRAHAM, *supra* note 15, makes a variation of this argument at 11–13, 65–66, but talks specifically about comparison of the cost of insurance to the cost of loss control.

184. K. ABRAHAM, *supra* note 15, at 65–67.

185. *Id.*

186. *Id.* This is the second of the three types of moral hazard described in *supra* notes 56–60 and accompanying text.

amount of insurance when price equals expected loss,¹⁸⁷ and that they will remain willing to purchase with some loading for costs.¹⁸⁸

In the previous section on positive economics, arguments based on theory developed by Rothschild, Stiglitz, Wilson, and others were outlined.¹⁸⁹ Those arguments include both predictions about market equilibria and conclusions about welfare gains and losses. If all assumptions and theoretical conclusions asserted are valid, the conclusions about optimizing welfare move from predictive to a fourth normative argument against regulation of classification.

C. Economic Reasoning to Define Discrimination

Two students of gender classification have argued that it should not be deemed legally discriminatory because discrimination should be defined by benefits to individual insureds as measured by the economic concepts of present value and expectancy.¹⁹⁰ Under this logic, it would be discriminatory not to use gender classification because of the difference in present values.¹⁹¹ In the words of Professor Benston, the leading proponent of this approach:

[T]he value of any form of insurance to the insured is measured by the present value of the amounts promised multiplied by the probability that the event insured against will occur, where the probabilities are assessed as accurately as possible, considering the costs and benefits of making these assessments and controlling for the effects of moral hazard and adverse selection.¹⁹²

Professor Benston's comments addressed gender classification in annuities, but this logic could be extended to any line of insurance (and any classification) to say that no legal discrimination exists when premiums and benefits are differentiated, so long as the present value to members of each group classified is the same.¹⁹³

Following this approach, the defendant employer in *Arizona Governing Committee v. Norris* argued to the United States Supreme Court that Title VII was not violated because men and women received equal value in an annuity plan despite women's higher contributions.¹⁹⁴ The Supreme Court rejected this test for Title VII,¹⁹⁵ but the argument continues to be made in resistance to classification restriction generally.¹⁹⁶

IV. CRITIQUE

The following synthesizes the framework underlying most of the previous analyses. The neoclassical view of a competitive market model assumes: 1) actors

187. See *supra* notes 38–52 and accompanying text.

188. Arrow, *supra* note 47, at 960.

189. See *supra* notes 152–80 and accompanying text.

190. Benston I and II, *supra* note 11; three articles by Miller, *supra* note 15.

191. Benston I, *supra* note 11, at 492–93, 503–07; Miller, *Discrimination by Gender*, *supra* note 15, at 624–25.

192. Benston I, *supra* note 11, at 503.

193. See Miller's three articles, *supra* note 15.

194. *Ariz. Governing Comm. v. Norris*, 463 U.S. 1073, 1083 (1983).

195. *Id.* at 1083–86.

196. See Miller's three articles, *supra* note 15.

behave rationally to maximize utility,¹⁹⁷ 2) perfect information,¹⁹⁸ 3) many buyers and sellers,¹⁹⁹ 4) no significant barriers to new entrants,²⁰⁰ 5) no transaction costs,²⁰¹ and 6) a homogeneous product.²⁰² With these conditions satisfied, competition will drive prices to their marginal cost.²⁰³ In the insurance market, this would mean that competition pressed prices to the actuarially fair premium, that is, expected loss. Expected loss also is the measure of what a rational risk averse consumer should be willing to pay. Any new classification for which benefits to one subgroup exceed losses will come into use because a competitor will enter the market to attract existing insurers from the overcharged customers in that subgroup.²⁰⁴

The result is desirable because consumers can buy what they desire. Insureds facing a high probability of loss will be willing to pay the higher prices their coverage costs. Insureds facing a low probability of loss will purchase the amount predicted by expected utility theory at lower rates.²⁰⁵ Pricing at expected loss will result in the optimal balance between insurance and loss prevention and reduction activity.²⁰⁶

Within the framework of neoclassical theory, it is assumed that a monopolist or several oligopolists may dominate the market and get a price that is greater than marginal cost. If expected utility theory is correct, only the comparatively risk averse would purchase such coverage, and excessive investment in loss prevention would result.²⁰⁷ If expected utility theory's predictions about the risk averter's demand function for insurance is wrong, such that people purchase insurance at somewhat higher than the actuarially fair premium, then profits, administrative costs, or reserves at excessive levels may be tolerated.²⁰⁸

Economists have developed the implications of one aspect of the perfect information assumption failing to hold: the asymmetrical information problem between insured and insurer that results in moral hazard and adverse selection.²⁰⁹ In

197. Economic theory predicts such rational behavior to be in line with expected utility theory. *See supra* notes 38–52 and accompanying text. For dispute that people actually behave in this fashion, *see infra* notes 294–320 and accompanying text. *See infra* notes 236–37 contrasting the approach of the institutionalists.

198. *See* C. FERGUSON & J. GOULD, *MICROECONOMIC THEORY* 225 (4th ed. 1975) (cited in P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 8). Economists have developed theories on the implications of insurers' lack of information on insureds' riskiness. *See supra* notes 53–63, 152–80, 189 and accompanying text.

199. C. FERGUSON & J. GOULD, *supra* note 198, at 224–25. While the total number of sellers in a given line of insurance is large, markets for particular customers often are segmented so effective price and service competition is muted. *See infra* note 263 and accompanying text.

200. C. FERGUSON & J. GOULD, *supra* note 198, at 224–25. Some statutory barriers exist. *See infra* notes 278–82 and accompanying text. The start-up costs to compete as a direct writer in property/liability insurance are a large and effective barrier to competing in the market for preferred risks. *See infra* note 264 and accompanying text.

201. C. FERGUSON & J. GOULD, *supra* note 198, at 224–25. This is also termed the free mobility of resources. For transaction costs in the insurance market, *see infra* notes 238–332 and accompanying text.

202. C. FERGUSON & J. GOULD, *supra* note 198, at 224–25. For a discussion of product differentiation in the insurance market, *see infra* notes 344–48 and accompanying text.

203. P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 9.

204. For dispute of this prediction, *see infra* notes 241–54 and accompanying text.

205. For dispute of this proposition, *see infra* notes 294–320 and accompanying text.

206. For questions raised about the trade-off between insurance and loss prevention and reduction activities in the personal lines of insurance, *see infra* notes 241–54 and accompanying text.

207. K. ABRAHAM, *supra* note 15, at 13. For a dispute that expected utility theory accurately predicts buying behavior, *see infra* notes 294–320 and accompanying text.

208. WILSON & HUNTER REP., *supra* note 67, at 74 n.1, comments that monopoly rents may show up as excessive expenses and other inefficiencies rather than as profits.

209. *See supra* notes 53–63, 152–80, 189 and accompanying text.

doing so, they conclude this information gap may result in continued instability in insurance markets or in equilibria that are inferior in overall consumer welfare to the result in a competitive market with perfect information.

The reality of the insurance market varies from the neoclassical model in many ways. Insurers are not always under strong pressure to price at expected loss, and insureds are willing to buy insurance priced at higher than expected cost. Consumers may buy insurance at higher than the actuarially fair premium for several reasons. Expected utility theory may be incorrect about the demand function for insurance.²¹⁰ Rational decisionmaking may be an impossible condition to meet because people's rationality is bounded.²¹¹ Consumer demand might be inelastic, that is, not highly sensitive to price, in some instances because it is a "tied good." This means that government or some other entity requires its purchase to take part in another desired activity.²¹²

Even consumers may not find the lowest price available in the market for their classification. It is difficult to get price information on insurance,²¹³ and, if one has prices, it is difficult to tell if the products are comparable.²¹⁴ The offer and acceptance process is costly in time, and there are risks of losing coverage altogether by changing companies.²¹⁵ The complexities of the product encourage reliance on agents who may be motivated by their own commission structures rather than the lowest price for the consumer.²¹⁶

On the supply side, competition does not press price to the lowest levels. State statutory barriers protect existing companies from competition²¹⁷ and deflect pressure to reduce the costs of expensive delivery systems.²¹⁸ Economists who have analyzed the property/liability market find two markets—one for the "cream" of risks, dominated by a few large direct writers, and one for less desirable risks, left to companies selling through independent agents to those perceived as less desirable risks.²¹⁹ They conclude prices in neither market are driven to competitive levels in part because of cartelized ratemaking.²²⁰

Contrary to theory, insurers may not be so anxious to come up with new classifications.²²¹ Many insurance companies are mutuals whose structure does not pressure management to lower administrative costs in order to raise profits.²²²

A sophisticated analysis of competitive behavior in insurance markets requires

210. See *infra* notes 294–320 and accompanying text.

211. *Id.*

212. See *supra* notes 124–25 and accompanying text.

213. See *infra* notes 321–23 and accompanying text.

214. See *infra* notes 322–23 and accompanying text.

215. See *infra* note 332 and accompanying text.

216. See *infra* notes 324–26 and accompanying text.

217. See *infra* notes 261–62, 265–66, 268–74, 277, 279, 373–82 and accompanying text.

218. See *infra* notes 239–40, 255–58 and accompanying text.

219. See *infra* note 263 and accompanying text.

220. See *infra* notes 259–64 and accompanying text.

221. See *infra* notes 252–54 and accompanying text.

222. See *infra* note 293 and accompanying text.

taking investment income into account.²²³ In times of high interest rates, prices may be cut for less desirable risks if such risks generate high volumes of premium income.²²⁴

My critique in this part and my discussion of public policy implications in Part V come from two different approaches to law and economics—the Chicago School, grounded in neoclassical analysis, and the institutional or transaction cost approach. The Chicago School of neoclassical economics dominates the modern law and economics movement.²²⁵ One of its fundamental tenets is the Coase theorem, that individual exchanges in a competitive market allocate society's scarce resources to their most highly valued uses.²²⁶ This is both a positive prediction about what will happen under certain assumptions and a normative statement of what will happen under certain assumptions and a normative statement of what is believed to be desirable.

Because the neoclassicists see the competitive market as the ideal structure to support desirable exchanges,²²⁷ the usual focus of the Chicago School is to identify and suggest ways to minimize market imperfections.²²⁸ On the other hand, institutionalists seek to compare alternative institutional arrangements, granting all to be imperfect, and view the market as only one possible approach rather than the single ideal of the neoclassical model.²²⁹ Institutionalists are concerned about the possibilities for "opportunism" in a market exchange.²³⁰ They look for governance structures that will minimize transaction costs and discourage opportunistic behavior.²³¹ This approach has been applied in examining why alternatives to the market

223. See *infra* notes 243–46 and accompanying text.

224. See *infra* note 245 and accompanying text.

225. See *supra* note 25 and accompanying text.

226. This theorem was developed in Coase, *The Problem of Social Cost*, 3 J. L. & Econ. 1 (1960). The Coase theorem often is invoked to suggest limited legal intervention in the market. It has been termed "ironic" that the second half of Coase's famous article proposes that efficiency requires comparison of costs and benefits of alternative institutional structures when transaction costs are significant, and thus is a forerunner of the institutional approach as well as the Chicago School. Barreto, Husted, & Witte, *Review Essay: The New Law and Economics: Present and Future*, 1984 AM. B. FOUND. J. 253, 261.

227. P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 8–9.

228. *Id.* at 8–13.

229. P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 24–25. Kunreuther & Slovic, *supra* note 25, at 65 have commented: "Because economists have focused primarily on market mechanisms for studying social problems, they have paid relatively little attention to the impact that alternative institutional arrangements would have on behavior if an insurance market fails."

Two general developments of the institutional approach are: Komesar, *In Search of a General Approach to Legal Analysis: A Comparative Institutional Alternative*, 79 MICH. L. REV. 1350, 1351–52 (1981), and O. Williamson, *Contract Analysis: The Transaction Cost Approach* in P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 39. In addition to this normative use of transaction costs analysis, the approach is also used to predict and describe which institutional arrangement will be chosen for a voluntary transaction; see, e.g., Palay, *Comparative Institutional Economics: The Governance of Rail Freight Contracting*, 13 J. LEGAL STUD. 265, 265 (1984).

230. G. GARVEY, *supra* note 25, at 26; P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 24 quoting Williamson, Wachter, & Harris, *Understanding the Employment Relation: The Analysis of Idiosyncratic Exchange*, 6 BELL J. ECON. 250, 258 (1975), in defining opportunism as "'effort(s) to release [sic] individual gains through [a] lack of candour or honesty in transactions.'"

231. P. BURROWS & C. VELJANOVSKI, *supra* note 25, at 24.

develop in some kinds of contracting,²³² other more general contract issues,²³³ and antitrust,²³⁴ but rarely to the insurance industry.²³⁵

While neoclassicists view people as rational utility maximizers,²³⁶ institutionalists draw on Herbert Simon's challenge that people's utilities generally are bounded.²³⁷ This means that even if perfect information were available, people would not process it but rather would simplify the world within some bounds.

The institutionalists' approach is particularly valuable as a mode of analysis for insurance questions because important ways in which the neoclassical model varies from reality—imperfect information, possibilities for opportunism, high transaction costs, bounded rationality—are the very features upon which the institutionalists focus.

The first two subparts that follow outline the numerous types and possible magnitude of transaction costs in insurance. The third subpart discusses externalities that arise when people are uninsured and underinsured. The fourth subpart discusses how competition actually works in the insurance market. The fifth subpart examines the four normative arguments outlined in Part III that purport to favor refined classification and oppose its restriction.

The sixth subpart discusses the inappropriateness of using expected utility concepts, formulated to predict what insureds should want to pay, for a legal definition of discrimination. The final subpart considers the reasonableness of statistical association, with loss as a criterion for classification use on fairness grounds when its justification on economic efficiency grounds has been considerably weakened.

A. Insurers' Transaction Costs

Insurers incur at least four kinds of transaction costs in producing insurance: 1) loss projection and classification costs, including the cost of gathering information on loss associated with particular characteristics, the cost of processing information gathered and extrapolating from it, and the process of applying information to applicants; 2) sales costs, that is, commissions and salaries to sales people, advertising, and any other costs that go to making successful sales; 3) costs of delivering compensation including investigating, settling, and paying claims; and 4) reserves against loss. Administrative costs then are passed on to consumers as loading for expenses added to the part of the insurance premium based on insured's expected loss.²³⁸

232. See Palay, *supra* note 229, at 265; Williamson, *Franchise Bidding for Natural Monopolies—in General and with Respect to CATV*, 7 BELL J. ECON. 73 (1976).

233. Williamson, *Transaction-Cost Economics: The Governance of Contractual Relations*, 22 J. L. & ECON. 233 (1979); Goldberg, *Toward an Expanded Economic Theory of Contract*, 10 J. ECON. ISSUES 45 (1976); Macneil, *The Many Futures of Contracts*, 47 S. CAL. L. REV. 691 (1974); Macneil, *Contracts: Adjustments of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contract Law*, 72 NW. U. L. REV. 854 (1978).

234. Williamson, *Vertical Merger Guidelines: Interpreting the 1982 Reform in ANTITRUST POLICY IN TRANSITION: THE CONVERGENCE OF LAW AND ECONOMICS* 253 (E. Fox & J. Halverson eds. 1984). G. Garvey, *supra* note 25.

235. See *supra* note 25.

236. R. Posner, *supra* note 25, at 3. Neoclassical analysis assumes that, although every individual choice may not be rational, people's choices are overall rational. P. Burrows & C. Veljanovski, *supra* note 25, at 3–4.

237. P. Burrows & C. Veljanovski, *supra* note 25, at 28 n.56, define bounded rationality as "the cognitive limits of individuals to deal comprehensively with the complex decisions they are required to make."

238. Arrow, *supra* note 47, at 960.

A neoclassicist assumes a seller's administrative costs will be minimized in a competitive market. In recent congressional hearings on competition in the insurance industry, Andrew Tobias, a writer of popular works on business and finance who spent five years writing a book on the insurance industry, illustrates his argument on inefficient overstaffing of the insurance industry by comparing it to some other enterprises.²³⁹ He contrasts the insurance industry's two million workers, nearly two percent of the nation's work force, with the U.S. Postal Service's employment of just over one third that number and with banks and thrifts, who together employ one quarter fewer people.²⁴⁰

As later discussions will reiterate, a neoclassicist faced with excessive transaction costs or profits looks for market imperfections that can be eliminated so the invisible hand can pressure reductions. Faced with the same evidence, the institutionalist sees the possibility of opportunism and thinks about how alternative structures might reduce transaction costs.

1. *Loss Projection and Classification*

Law and economics commentators suggest that insurers have no reason to choose classifiers except on the power to predict riskiness. If a classifier first meets that condition, then it will be scrutinized on additional criteria, including whether administrative costs of so classifying exceed benefits to a subgroup of insureds.²⁴¹ Economic models posit that competitive pressures will have insurers always on the lookout for new classifications to attract customers overcharged by other insurers.²⁴² This subpart looks at three possibilities about insurers' costs in projecting losses and classifying risks that question aspects of the previously stated summary.

The first possibility is that in times of high interest all, or at least the major share, of profit in some lines of insurance may come from investment income. Thus, the paramount economic incentives in the insurance business may be to design a classification system that will maximize premium revenues. The second is evidence suggesting that insurers do not scrutinize the cost of classification in the manner suggested. The third is that the organizational milieu of insurers may make them more hesitant to introduce a new classification than might be predicted by law and economics commentary. All these possibilities can persist because of the problems with competition in the insurance industry described in this Article.

The general standard for rate regulation in property/liability insurance has been that investment income on premiums is not taken into account.²⁴³ Rates were to allow a five percent profit on underwriting income. This has been criticized by some

239. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 45, 47-48 (testimony of Andrew Tobias).

240. *Id.* For a breakdown of jobs performed by insurance workers, see Tobias' book, *THE INVISIBLE BANKERS: EVERYTHING THE INSURANCE INDUSTRY NEVER WANTED YOU TO KNOW* 33-37, 49 (1982).

241. *See supra* notes 64-74, 182 and accompanying text.

242. *See supra* notes 152-80, 182, 183-89 and accompanying text.

243. R. HUNTER, *TAKING THE BITE OUT OF INSURANCE: INVESTMENT INCOME IN RATEMAKING* 1-2 (1980), reports that only 17 states consider investment income in private passenger car ratemaking and says that the method in 13 of those states "seriously understates the impact." This study also reports only four states requiring investment income to be taken into account in homeowner's insurance ratemaking. *Id.* at 12. WILSON & HUNTER REP., *supra* note 67, at 7-8.

economists, who argue that once investment income is taken into account a zero or negative profit on underwriting might be appropriate.²⁴⁴

In the recent high interest rate period, it has been suggested that rather than lower premium rates for insureds in the personal lines to reflect increased investment income from reserves, underwriting standards in the commercial lines were relaxed in order to generate greater volumes of premium income.²⁴⁵ This would be consistent with the theory advanced by some that the current "crisis" in commercial property/liability insurance is more attributable to lower interest rates than to an upsurge in litigation, pro-plaintiff tort laws, or excessive jury verdicts.²⁴⁶

As to whether insurers do a careful cost-benefit analysis of the costs of classification, a study of automobile insurance classification commissioned by a property-casualty trade group found almost no attempt by automobile carriers to measure the costs of classification on an average or incremental basis.²⁴⁷ A year-long investigation of the life insurance industry by a *Washington Post* reporter describes personal background checks made on about two million insurance applicants a year by Equifax in Atlanta, Georgia.²⁴⁸ As an example, he reports that Metropolitan Life orders such investigations of all applicants for more than \$100,000 in insurance, more than ten percent of applicants.²⁴⁹ Metropolitan has paid as much as \$3.4 million in one year for Equifax's services.²⁵⁰ At Kessler's request, Provident Mutual Insurance company checked records for 5700 insurance applicants and reported no denials based on an Equifax report, and only ten insureds were charged higher rates.²⁵¹

The institutional attitude of the insurance industry may be more the avoidance of risk than a rush to compete vigorously in the market.²⁵² For an underwriter, a new classification is an unknown. There may be a fear that moral hazard will operate in some way such that those who are so classified will not reflect the same loss distribution as the sample on which the premiums were calculated.²⁵³ I agree with the economists' prediction, stated earlier, that once some insurers introduce a new

244. WILSON & HUNTER REP., *supra* note 67, at 6, 112-35. Wilson and Hunter suggest that at the level of investment income prevailing at the time of their report (1983), zero or negative underwriting profits would be warranted for various property and casualty lines. Hill, *Profit Regulation in Property-Liability Insurance*, 10 BELL J. ECON. 172, 173 (1979), concludes similarly that appropriate underwriting profits in some lines plausibly could be negative.

245. WILSON & HUNTER REP., *supra* note 67, at 66-67. See sources cited in Wortham, *supra* note 1, at 377-78.

246. Strasser, *Tort Crisis Focus Shifts to Insurers*, Natl. L.J., June 9, 1986, 1, 8-9; Hunter, *Taming the Latest Insurance "Crisis"*, N.Y. Times, Apr. 13, 1986, at F3, col. 1; Hunter, *The Insurance Industry is to Blame*, Wash. Post, Apr. 13, 1986, at C7, col. 2; Nichols, *The Manufacturing of a Crisis*, THE NATION, Feb. 15, 1986, 173-75.

247. SRI REP., *supra* note 72, at 127.

248. R. KESSLER, *supra* note 104, at 127-53.

249. *Id.* at 133.

250. *Id.*

251. *Id.* at 136-37.

252. An economist, in congressional hearings on insurance competition, testified that market concentration and traditional cartel activities stifle competition in property/liability insurance. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 454-55 (testimony of John Wilson). He argued that the exchange of price information in rating bureaus is . . . "designed to bring security and profits to underwriters . . ." and encourages ". . . an *esprit de corps*, a live-and-let-live code of ethics, commercial interrelationships, intermingled interests through reinsurance, and a spirit of reciprocal recognition of priorities of interest . . ." *Id.* He concluded rate bureaus "are as effective as formal cartels in monopolizing markets." *Id.*

253. Wortham, *supra* note 1, at 411.

classifier, other insurers are pressured to follow suit from fear of adverse selection.²⁵⁴ At the same time, the pressure on a company to first introduce the new classification may not be as strong as posited.

2. Sales Costs

This subpart examines the expense of selling insurance and considers why pressures to lower that cost may be weak. Selling insurance one policy at a time through independent agents is expensive. Life insurance agents in particular spend many hours per sale.²⁵⁵ As compensation, their commissions range from 25 to 130 percent of the first year's premium. Additional compensation goes to managers of salespeople.²⁵⁶ A recent book on the life insurance industry claims only forty-one cents of each premium dollar is returned to policy holders—fourteen cents in death benefits and twenty-seven cents in investment returns and similar benefits.²⁵⁷ The life insurance industry defends their expensive sales method by saying people would not buy the coverage their families need without aggressive sales—the industry adage that life insurance is sold, not bought.²⁵⁸

The large direct writers in property/liability insurance have competed effectively with independent agents, in part by lowering the cost of sales in ways described earlier.²⁵⁹ At the same time, it has been suggested that the direct writers do not price as low as their expense advantage warrants.²⁶⁰ One student of the industry argues that state rate regulation is the problem because rates are pegged to protect the expense levels of independent agents and direct writers, who therefore can compete effectively for good risks without having to lower prices to the level of their expense advantage.²⁶¹ Other industry analysts argue that cartelized ratemaking, permitted by the McCarran-Ferguson exemption for the insurance industry, keeps rates higher than they would be otherwise.²⁶² Since the direct writers usually are quite selective in underwriting, there may be in effect two markets in property/liability insurance—the direct writers competing for the preferred risks, albeit perhaps not as aggressively as

254. See *supra* notes 152–80 and accompanying text.

255. A successful agent was quoted in a trade publication as saying a new sale required about 27 hours of work. R. KESSLER, *supra* note 104, at 234. Kessler reports as typical 10 phone calls to get an appointment and only 50% of appointments resulting in sales. *Id.* at 8.

Kessler recounts considerable resistance to cheaper techniques like direct mail and group insurance. He recounts the anecdote of a California agent who placed 14 term advertisements in local newspapers and sold 88 policies with premiums totalling \$96,000. *Id.* at 236. The agent was surprised that applicants actually arranged for their own medical exams without agent prodding. Still he suggested that the major value of this technique was to generate prospects for whole life and “other higher premium contracts.” *Id.*

256. *Id.* at 8–9. Commissions for managers of the companies are called “overrides.” Kessler reports a Prudential manager in Colorado who manages and trains seventy agents made \$274,525 in one year. *Id.* at 9.

257. *Id.* at 2. The yields on the investment portion of the whole life premium are much less than investments a consumer might make elsewhere. *Id.* at 244–47. In Kessler's words, “Somewhere along the line, the industry that collects \$50 billion a year from American consumers lost sight of what it was doing. It got sidetracked from selling life insurance into selling low-yielding investments.” *Id.* at 247.

258. *Id.* at 8.

259. See *supra* notes 93–96 and accompanying text.

260. Joskow, *supra* note 87, at 377, 412–17.

261. *Id.*

262. WILSON & HUNTER REP., *supra* note 67, Appendix A at 29–39.

possible, and the companies represented by independent agents competing for the less preferred risks.²⁶³ Capital requirements for entering the market through independent agents are considered relatively modest, but entry as a direct writer requires tremendous resources unless one can tap an existing network.²⁶⁴

Some legislative proposals are directed to putting competitive pressure on agent commissions. One suggestion is repeal of anti-rebate laws that forbid agents from discounting their commissions.²⁶⁵ Another is mandatory disclosure of agent commission rates or a requirement that rates be quoted net of commission.²⁶⁶ Such proposals have been opposed by most of the industry.²⁶⁷ An expert on the property/liability market has identified laws giving agents a property right in renewals as a barrier to the growth of direct writers.²⁶⁸

There are also legal barriers to two forms of delivery that could reduce sales cost—group sales and sale through an existing sales network so the marginal cost of adding another product would be minimal. A 1970 study for the U.S. Department of Transportation by two insurance experts, Spencer Kimball and Herbert Denenberg, urged attention to a number of barriers to group marketing of property/liability insurance:²⁶⁹ confusion as to whether group sales had to be authorized by statute rather than merely not prohibited;²⁷⁰ clarity that unfair discrimination laws do not apply when lower rates are offered to group members;²⁷¹ fictitious group statutes and regulations;²⁷² statutes specifically written to restrict mass merchandising in property/liability insurance through such guises as an unreasonably large minimum number of members in the group and a high minimum percentage of participants.²⁷³ The study

263. WILSON & HUNTER REP., *supra* note 67, Appendix A at 44–53. Joskow, *supra* note 87, at 377, summarized his findings on the property/liability industry by saying that “. . . the underwriting behavior of direct writers is shown to be consistent with profit-maximizing oligopoly behavior of a small group of low cost firms, insulated from entry, and operating in a market where prices are kept above competitive levels by the combined actions of rating bureaus and insurance regulators.” He finds that substantial cost advantages for the very large scale direct writers may create barriers to entry so the large firms can set prices “substantially above marginal cost without provoking competitive entry.” *Id.* at 384.

264. WILSON & HUNTER REP., *supra* note 67, at 48–49; Joskow, *supra* note 87, at 388–91.

265. This was suggested by the U.S. Department of Justice in a report to the Task Force on Antitrust Immunities of the Economic Policy Board published as P. MacAvoy (ed.), *FEDERAL-STATE REGULATION OF THE PRICING AND MARKETING OF INSURANCE* 68–69 (1977), [hereinafter cited as DOJ REPT.]. For history and interpretation of antirebate statutes, see Wortham, *supra* note 1, at 384–86 nn.183–206 and accompanying text. WILSON & HUNTER REP., *supra* note 67, at 61–63 term these “fair trade” or resale price maintenance laws which are forbidden for other retail goods.

266. The Justice Department argued that these proposals were more likely to reduce commissions through competition than repeal of antirebate statutes. DOJ REPT., *supra* note 265, at 69–72.

267. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 112, 122.

268. Joskow, *supra* note 87, at 404 (citing *National Fire Ins. Co. v. Sullard*, 89 N.Y.S. 934 (1904) quoted in WILSON & HUNTER REP., *supra* note 67, at 49). See Joskow, *supra* note 87, at 384.

269. S. KIMBALL & H. DENENBERG, *supra* note 108. Spencer Kimball, now a professor at the University of Chicago Law School and then dean of the University of Wisconsin Law School, is the author of numerous articles and books on insurance. Herbert Denenberg was then Loman Professor of Insurance at the Wharton School of Finance and Commerce at the University of Pennsylvania and later became the Pennsylvania Insurance Commissioner.

270. The authors conclude that no such authorization is necessary but discuss confusion existing on the point. *Id.* at 94–97.

271. *Id.* at 97–100. For information about unfair discrimination statutes generally, see *supra* notes 115–18 and accompanying text and Wortham, *supra* note 1, at 381–92.

272. S. KIMBALL & H. DENENBERG, *supra* note 108, at 100–03.

273. *Id.* at 105–06. A more recent Department of Justice Report says such provisions may be found in “pseudoenabling legislation which technically permits collective merchandising but actually imposes conditions and restrictions designed to make it unfeasible.” DOJ REPT., *supra* note 265, at 74–76. Both S. KIMBALL & H. DENENBERG,

also mentioned restrictions on the use of credit cards to buy insurance (a limitation that is applicable to more than group sales).²⁷⁴

As an introduction to the property/liability study, Kimball and Denenberg traced the history of group life and health insurance.²⁷⁵ Both were bitterly opposed by insurance companies and agents who saw them as threats.²⁷⁶ Such opponents were successful in securing enactment of statutory limitations in those lines, such as minimum group size, minimum percentage of participants, and low coverage limits.²⁷⁷

At the turn of the century, Louis Brandeis proposed that costs of the sale of life insurance be reduced by selling life insurance through savings banks.²⁷⁸ Only three states permit such sales, and the maximum limits permitted are very low, despite findings that such policies are one of the best life insurance values that can be purchased.²⁷⁹ Critics claim that industry opposition stemmed the growth of this product.²⁸⁰ Banks periodically renew efforts to get into the insurance business, and the insurance industry continues to oppose them.²⁸¹ One of the main proposals by business writer Andrew Tobias, at recent congressional hearings on competition in the insurance industry, was to remove barriers to competition from banks.²⁸²

3. *Costs of Delivering Compensation*

The previous subpart dealt with sales costs, which I believe may be higher than vigorous competition might yield in both individual life insurance and property/liability insurance. This subpart considers the high cost of delivering compensation, a problem primarily in property/liability insurance. A prominent insurance textbook calculates that only forty-two cents of the premium dollar in automobile insurance goes to claimants.²⁸³ Thirty-two cents of the premium dollar goes for legal fees paid by insurers and insureds in settling claims.²⁸⁴ This phenomenon triggered proposals for no-fault insurance,²⁸⁵ but there has been tremendous resistance to abandonment of

supra note 108, at 74–77, and the DOJ Rept., *supra* note 265 at 75–76, describe the political activities of agents' organizations in getting such statutes passed.

274. S. KIMBALL & H. DENENBERG, *supra* note 108, at 104.

275. *Id.* at 19–30 (group life insurance termed "A Case Study in Resistance to Mass Marketing").

276. *Id.*

277. *Id.* Kimball and Denenberg report that in the late 1960s half the states had provisions limiting group term life insurance to one and one-half times an employee's annual income with a minimum of \$20,000 and a maximum of \$40,000 while 18 states had no limit. *Id.* at 28 citing D. MCGILL, *LIFE INSURANCE* 696 (rev. ed. 1967). A recent book on life insurance claims that although many states' caps on the amount of group life insurance have been lifted, most employers are unaware of that and "[m]ost insurance companies do nothing to tell them." R. KESSLER, *supra* note 104, at 237. Kessler claims insurers do not push group term life because whole life is so much more profitable and reaps greater benefits for agents. *Id.* at 22.

278. D. JOHNSON, *SAVINGS BANK LIFE INSURANCE* 3 (1963).

279. R. KESSLER, *supra* note 104, at 234–35; TOBIAS, *supra* note 240, at 236–40, 273.

280. R. KESSLER, *supra* note 104, at 234–35; TOBIAS, *supra* note 240, at 238–39.

281. *Upheaval in Life Insurance*, *BUS. WK.*, June 25, 1984, 58, 60.

282. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 55–56.

283. F. CRANE, *supra* note 58, at 125–26.

284. *Id.*

285. The seminal case for no-fault auto insurance and outline of a plan for it are set out in R. KEETON & J. O'CONNELL, *BASIC PROTECTION FOR THE TRAFFIC VICTIM: A BLUEPRINT FOR REFORMING AUTOMOBILE INSURANCE* (1965).

the fault system. No state has adopted a pure no-fault system.²⁸⁶ Many so-called no-fault plans retain a tort cause of action in so many situations that there is little saving in administrative cost.²⁸⁷

Claims adjustment also seems to exact a high price in fire and homeowner's insurance. Robert Hunter, a former Deputy Federal Insurance Administrator who is now President of the National Insurance Consumer Organization, has testified that only three dollars of benefits are returned to insureds for each five dollars in premiums paid in fire and homeowner's insurance.²⁸⁸

4. Reserves

The previous section quoted figures showing a low pay-off in life insurance.²⁸⁹ High sales costs account for some of the difference.²⁹⁰ Much of the rest may be in excessive reserves that make life insurance companies one of the largest concentrations of capital in the economy.²⁹¹ It is argued that various statutory provisions and accounting principles encourage life insurers to accumulate reserves far in excess of those needed for policyholder security.²⁹² Furthermore, it has been charged that because many insurers are mutuals, they are not pressured to return profits to stockholders and can concentrate instead on increasing the size of their enterprises.²⁹³

B. Insureds' Transaction Costs

Insureds should incur at least three kinds of transaction costs in purchasing insurance in a competitive market: 1) information costs in making rational decisions, including determination of the insureds' likelihood and predicted magnitude of loss in relation to coverage needed and the price they should be willing to pay; 2) search costs in deciding from which insurer to purchase; and 3) costs that may be incurred in making application for insurance, for example, time involved in having a physical examination and waiting for an insurer's acceptance of the insured's policy offer.

286. F. CRANE, *supra* note 58, at 126-29.

287. F. CRANE, *supra* note 58, at 128-29, says these should be called "add-on" plans so as not to be confused with the original no-fault concept.

288. *House Hearings on Competition*, 98th Cong., *supra* note 6, 369, 372.

289. *See supra* note 257 and accompanying text.

290. *See supra* notes 255-56 and accompanying text.

291. A life insurance trade publication reported assets at \$588.2 billion at the end of 1982. AMERICAN COUNCIL OF LIFE INSURANCE, 1983 LIFE INSURANCE FACT BOOK 67 (1983).

292. R. KESSLER, *supra* note 104, at 158, quotes the chief actuary of the New Jersey Insurance Department, the executive Vice-President of the American Council of Life Insurance, and a representative of a stock brokerage firm all as indicating that reserves may be one-third higher than that necessary for solvency. The reasons he ascribes are use of overly conservative estimates of investment return, *id.* at 156, and accounting conventions that undervalue income and assets, *id.* at 157. He cites the actuarial rule of thumb that every percentage point reduction in investment returns requires reserves to be increased 10%. *Id.* at 158. *See also* K. ORREN, *CORPORATE POWER AND SOCIAL CHANGE: THE POLITICS OF THE LIFE INSURANCE INDUSTRY* 72-74 (1974).

293. *See generally* *Rights and Remedies of Insurance Policyholders, Pt. 2: The Role of the Policyholder in Mutual Insurance Companies; Hearings Before the Subcomm. on Citizens and Shareholders Rights and Remedies of the Senate Comm. on the Judiciary*, 95th Cong., 2d. Sess. (1978) (on how mutual companies actually work).

1. *Making Rational Buying Decisions*

An introductory section outlined that expected utility theory, as a positive prediction and normative model, says people will, and should, want to: 1) buy all insurance offered at actuarially fair premiums; 2) reject insurance at premiums priced higher than the actuarially fair premium plus a modest loading for administrative cost; and 3) because of the relative expense of administrative costs with regard to low amounts of coverage, should prefer full coverage above a deductible.²⁹⁴ There are, however, many examples to the contrary.

Most individuals in flood plains do not purchase flood insurance even when it is subsidized ninety percent by the federal government, and therefore much cheaper than the actuarially fair premium.²⁹⁵ Not much of the heavily subsidized crime insurance is sold to renters, homeowners, and small businesses in urban areas.²⁹⁶ On the other hand, people buy insurance priced far above the actuarially fair premium such as health or life insurance limited to one hazard, e.g., cancer or flight insurance and credit life insurance.²⁹⁷ A former Chairman of the Federal Trade Commission has asserted that twenty-three percent of people over sixty-five who buy private health insurance buy unnecessary policies that duplicate other coverage.²⁹⁸ Contrary to predictions about the optimum purchase, people frequently choose small deductibles.²⁹⁹ In automobile insurance, while many insure themselves at a high cost for small losses by choosing a small deductible, they take minimum coverage limits and choose not to insure themselves for potentially large losses at a smaller relative cost.³⁰⁰

Another rational buying issue arises with regard to the choice between whole and term life insurance. As explained earlier, a portion of the premium in the early years of a whole life insurance contract is invested to subsidize the insurance portion of the premium in later years when the risk of death is higher.³⁰¹ The controversy about rational buying arises because the interest return on the investment portion of the premium is very low.³⁰² It is argued that people would be better off buying term insurance and investing the difference at a higher return, or putting the equivalent premium paid for whole life into term to get higher coverage limits in the years when

294. See *supra* notes 46–49 and accompanying text.

295. Kunreuther, *supra* note 25, at 228 citing H. KUNREUTHER, RECOVERY FROM NATURAL DISASTERS: INSURANCE OR FEDERAL AID? (1973).

296. Kunreuther, *supra* note 25, at 228 (citing FIA, *supra* note 127, at 33).

297. A table of approximate pay-outs from various forms of insurance can be found in TOBIAS, *supra* note 240, at 72. It shows a pay-out of \$.48 on credit life insurance, \$.41 on cancer insurance, and \$.10 on flight insurance. This is in contrast to \$.93 on Blue Cross plans and \$.87 for group health insurance. See also Kunreuther, *supra* note 25, at 228 (citing Eisner & Strotz, *Flight Insurance and the Theory of Choice*, 69 J. POL. ECON. 355 (1961)).

298. See generally *Abuses in the Sale of Health Insurance to the Elderly*, Hearing Before the Select Comm. on Aging, 95th Cong., 2d Sess. (1979).

299. Kunreuther, *supra* note 25, at 228 citing Pashigian, Schkade, & Menefee, *The Selection of an Optimal Deductible for a Given Insurance Policy*, 39 J. BUS. 35 (1966) [hereinafter cited as Pashigian].

300. See Keeton & Kwerel, *supra* note 15, at 149, for a proposal with regard to this phenomenon.

301. See *supra* notes 78–80 and accompanying text.

302. Michael Pertschuk, former Chair of the Federal Trade Commission, has testified that a study by the Commission found the return on the investment portion of whole life premiums in the hands of all consumers in 1977 to be 1.3% per annum. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 66, 69–70.

it is most needed, that is, when children are still dependent.³⁰³ Insurers defend the whole life product by saying people are more likely to keep whole life in force to preserve the cash or loan value, so even though the return is somewhat lower than could be achieved elsewhere, people are at least saving something and assuring some insurance for their family.³⁰⁴

A number of explanations have been offered to explain "irrational" insurance purchasing. The nature of the insurance transaction may be such that people are willing to buy what they are sold without making their own calculation of worth. Much insurance is sold through agents who offer the products of several companies and who, particularly in life insurance, offer a number of similar products from the same company. These products often vary widely in benefits to the agent in commissions.³⁰⁵ Agents behave rationally in offering the product of greatest benefit to themselves. There may be little motivation to sell a product with a low commission structure.³⁰⁶ If insureds do not have enough information to assess whether a product is best for them, they may buy what is recommended without further consideration.

Automobile and homeowner's insurance may be purchased only because they are required for other activities, that is, to register a car, to finance a car or home.³⁰⁷ An early study of the choice for low deductibles in auto insurance found that most financing institutions required the low deductible.³⁰⁸ A political scientist who studied auto insurance decisionmaking concluded that people care only about "satisficing" in the insurance decision, rather than making the optimum decision, because their real concern is the use of the car.³⁰⁹

Several students of insurance decisionmaking suggest that people do not think of the purchase of insurance as expected utility theory conceptualizes it. Rather consumers may think of insurance as an investment that should "pay off."³¹⁰ This

303. R. KESSLER, *supra* note 104, at 24, gives an example of a 32-year-old man buying a \$100,000 term policy from Metropolitan Life Insurance Company and investing the differences in premiums between the company's whole life and term coverage at 8% per year. Under the term policy, at age 65 he would have \$79,327 from his investment. In the event of death he would have \$179,327 (\$100,000 death benefit plus the \$79,327 investment). If he had purchased whole life instead, he would have \$100,000 if he died or \$53,100 if he cashed in the policy at age 65. Then he says that a premium of \$155 a year would buy the same 32-year-old a \$100,000 term policy from Metropolitan Life but that same premium would buy only \$8,055 in whole life insurance. *Id.* at 16.

304. F. CRANE, *supra* note 58, at 279.

305. Insurance officials, commenting on the findings of Pashigian, *supra* note 299, at 42, that people selected lower automobile insurance deductibles than expected utility theory would predict, said the theory was inadequate because it did not take into account that commissions on policies with lower deductibles are higher. Michael Pertschuk, then Chairman of the Federal Trade Commission, asserted in congressional testimony: "By and large, the poorer the investment, the higher the commission earned by the agent." *House Hearings on Competition*, 98th Cong., *supra* note 6, at 66.

One study showed agents deciding almost half the time (47.9%) which company to use based on the commission (combined with a satisfactory price, service, and coverage) as opposed to the lowest rate, best claims service, or best coverage. D. CUMMINS & S. WEISBART, *supra* note 87, at 62 (1977). R. KESSLER, *supra* note 104, at 22, reports the variance in one large life insurer's commission for \$100,000 of whole life insurance as nine times higher than the commission received on the sale of \$100,000 of term insurance. Kunreuther, *supra* note 25, at 251, comments on the small commissions to be earned by selling flood and earthquake insurance. A. TOBIAS, *supra* note 240, at 73-74 cites the very high commissions available for selling credit life and cancer insurance.

306. See *supra* note 268 and accompanying text.

307. See *supra* notes 124-25 and accompanying text.

308. Pashigian, *supra* note 299, at 43.

309. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 86 (testimony of Dr. Buford Brinlee).

310. Slovic, *supra* note 39, at 247-48, 255; Kunreuther & Slovic, *supra* note 25, at 67; Kunreuther, *supra* note 25, at 252.

would explain an attraction to low deductibles and insurance against frequently-occurring small losses rather than rarely-occurring large losses. It may explain the appeal of whole life policies with cash or loan values or a rebate if one lives to sixty-five even if the return on capital is low.

A body of psychological research suggests people, even intellectually sophisticated ones, are bad at probabilistic thinking.³¹¹ This psychological work fleshes out the dimensions of the concept mentioned earlier, namely that people's rationality is bounded.³¹² One limitation on rationality identified in laboratory and field studies is termed the "availability" effect—that people assess the likelihood of an event by the ease with which it can be imagined or the number of such instances that can be recalled.³¹³ For example, one study found people significantly overvaluing the possibility of accidents and cancer, while underestimating the risk from such hazards as asthma and diabetes.³¹⁴ This phenomenon may explain people's willingness to buy single hazard coverages on risks that receive considerable media attention rather than spending their premium dollars for coverage for loss with much less restriction on cause. The failure to purchase insurance for low probability, high loss events, even if premiums are subsidized, has been explained by saying that perception of the risk must rise to some "threshold of concern" before people will purchase the coverage.³¹⁵

Another explanation is that the utility curve is postulated incorrectly.³¹⁶ Rather than calculating preferences based on the asset position if there were a loss, thus having the greatest concern for losses bringing a major reduction in assets, people seem to be most sensitive to asset changes near zero.³¹⁷ Thus, they are motivated to buy insurance for probable losses rather than a remote loss even if the large loss would drastically reduce their assets.

Some insurance behavior could be rational if other factors were considered. Given that people will not be jailed if their total assets plus insurance coverage do not cover a liability award, it may be rational for a low asset driver to buy low maximum coverage no matter the level of his riskiness.³¹⁸ One might hypothesize that people do not buy flood or earthquake insurance because the federal government is often generous with disaster relief. A field study of uninsured homeowners in areas with considerable flood and earthquake risk found to the contrary. Almost two-thirds of those questioned expected no federal relief, and a substantial majority expected no aid at all.³¹⁹ That study concluded that reluctance to buy subsidized disaster insurance

311. Tversky & Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 *SCIENCE* 1124 (1974); Slovic, Fischhoff, & Lichtenstein, *Cognitive Processes and Societal Risk Taking* 165, 168–74, in J. CARROLL & J. PAYNE, *COGNITION AND SOCIAL BEHAVIOR* (1976) [hereinafter cited as Slovic & Fischhoff].

312. See *supra* notes 236–37 and accompanying text.

313. Tversky & Kahneman, *supra* note 311, at 1127–28; Slovic & Fischhoff, *supra* note 311, at 170–72; Kunreuther, *supra* note 25, at 243.

314. Slovic & Fischhoff, *supra* note 311, at 170–72.

315. Slovic, *supra* note 39, at 254–55; Kunreuther & Slovic, *supra* note 25, at 67.

316. Slovic, *supra* note 39, at 253–54. In more technical terms, this is the difference between a concave utility curve, as postulated by expected utility theory, and a convex curve with diminishing marginal utility over losses.

317. Slovic, *id.* Kahneman & Tversky, *supra* note 39, develop this idea further and refine theories of choice.

318. Keeton & Kwerel, *supra* note 15, at 149–50.

319. Kunreuther, *supra* note 25, at 236.

was primarily because the risk seemed too remote, people were unaware of the risk, and people were unaware of the insurance.³²⁰

2. Costs of Choosing Among Sellers

Once a consumer has decided that there is a need for insurance, deciding among insurers can require substantial search costs. Price quotes often are not available by phone.³²¹ Auto and homeowner's insurance are relatively standardized products but the many variations in contract provisions can make it very difficult to compare costs.³²² Life insurance, on the other hand, presents a complex and confusing set of policy options that makes it difficult to compare prices. There has been considerable discussion of the need for a standardized cost disclosure system to make comparisons possible, and the need for shopping guides with current price information.³²³

As discussed in previous sections, many consumers seem to rely on agents to make choices for them.³²⁴ Agents may recommend a particular policy on the basis of the commission received.³²⁵ Commissions normally are not revealed to customers.³²⁶

Quality comparisons are even more difficult. It is possible to find industry information on solvency, but it involves a visit to a library containing Best's series.³²⁷ Consumer satisfaction with companies on matters such as claims adjustment is difficult to ascertain except through the anecdotal experience of friends.³²⁸ In addition

320. *Id.* at 242-46.

321. WILSON & HUNTER REP., *supra* note 67, at 59. D. CUMMINS & S. WEISBART, *supra* note 87, at 49-50, studied the practices of independent insurance agents selling property/liability insurance. Almost one-quarter surveyed said they would not give price quotes on the phone.

322. Much of R. KESSLER, *supra* note 104, is devoted to examples and explanations for the difficulty of getting comparable price information about life insurance. He outlines the resistance of the industry to mandatory cost disclosure schemes that would put information in a common format. Variations in dividend policies and fluctuation in rates over the term of the policy complicate comparisons. He reports that when 20 life insurers were told that the Washington Post planned to list the yields on their policies nearly 20 letters came back objecting to the method with several questioning the importance of price in buying life insurance coverage. *Id.* at 20.

When Kessler asked an Equitable Life Assurance Society agent about price inquiries, the agent replied, "We have a stock answer that our training school tells us to say when people ask about prices. There are 2,100 companies in the country, and no two are alike. Where do you stop and where do you start? You buy from an agent you feel comfortable with." *Id.* at 40. A Richmond agent is quoted as saying, "If they want to get bids, I don't want them [as clients]. I don't use the rate of return because it will confuse people. People are looking for someone to guide them in making financial decisions." *Id.* at 122.

Joseph M. Belth, a professor of insurance who is the editor of a monthly periodical on insurance and a consumer guide on life insurance, summarized before a House subcommittee the problems that he finds with lack of information on life insurance: 1) prices vary widely between companies for the same coverage; 2) practices are deceptive, e.g., the manipulation of the cost of protection versus the interest component of premiums; 3) variations in price and commissions on policies offered by the same companies allow agents to push higher-priced higher commission policies; 4) charging low prices for protection for new buyers with higher prices to existing policy holders with inadequate information for the policyholders to detect the difference; 5) sharp price increases after 20 policy years; 6) not providing accurate information to agents. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 82, 84-85.

323. See generally *Cost Disclosure in Life Insurance*, Hearing Before the Subcomm. on Antitrust Monopoly and Bus. Rights of the Senate Comm. on the Judiciary, 96th Cong., 1st Sess. (1979) [hereinafter cited as *Cost Disclosure Hearings*]; *House Hearings on Competition*, 98th Cong., *supra* note 6, at 49-50, 69, 246, 683-90.

324. See *supra* notes 305-06 and accompanying text.

325. *Id.*

326. See *supra* note 266 and *infra* note 421 and accompanying text for a proposal to make revelation of commissions mandatory.

327. A.M. BEST Co., *Best's Insurance Reports* (published annually).

328. An exception is a survey completed by 218,000 CONSUMER REPORTS subscribers. Part of that data is described in *Homeowner's Insurance*, *supra* note 77 at 473.

to proposals on disclosure of price information previously mentioned, a government role in publishing consumer complaint ratios³²⁹ and data on financial security of companies has been suggested.

3. *Application Costs*

Insurance sales differ from most other contracts in the time lapse between the consumer's offer and the seller's acceptance, and there is considerably more uncertainty whether the offer will be accepted than in other transactions. Consumers apply for insurance and make an offer to buy on terms stated to them. The company then reviews the application documents and collects other information by such means as requiring a physical examination for life, health, or disability insurance. At this point, the company may refuse the application altogether or make a counter offer with higher rates or more restrictive coverage. Consumers who have spent considerable time comparing life insurance costs may find, after several weeks elapse, that what seemed to be the cheapest policy is not being offered at that price. They then must negotiate with the company to convince the insurer that its decision should be reversed. Otherwise, the consequence could not only be paying more to this company but to others as well since most insurance applications ask if the applicant has ever been refused or "rated up" by another company.³³⁰ A positive response is likely to result in similar treatment elsewhere.

Such initial time costs deter frequent shopping around for term life insurance policies, although policies advantageous at one age are often more comparatively expensive at another. Concerns about cash and loan value in life may deter switching policies.³³¹

The application and approval process in auto and homeowner's insurance are much simpler, but because companies generally can cancel in the first thirty or sixty days of a new policy, insureds may be leery of taking the risk of cancelling an existing policy without being sure of the replacement.³³² Restrictions on coverage of preexisting illness in some health and disability policies cause people to stay with an old policy even if it is more expensive.

C. *Externalities*

Externalities are created when the costs or benefits of one's activities accrue to someone else and are not compensated. When drivers are uninsured or underinsured,

329. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 156-57 (testimony of Ralph Nader). The Federal Aviation Administration now publishes consumer complaint ratios for airlines.

330. *Senate Hearings on S. 2474*, *supra* note 8, at 3; R. HOLTOM, *RESTRAINTS ON UNDERWRITING: RISK SELECTION, DISCRIMINATION AND THE LAW* 51-52 (1979).

331. F. CRANE, *supra* note 58, at 279, mentions the reluctance to let policies with cash values lapse. He discusses this as a potential advantage of whole life versus term insurance because insureds arguably will be more likely to keep some insurance in force even if the interest yield is low.

332. WILSON & HUNTER REP., *supra* note 67, at 40, 71-72. In testimony before the House Judiciary Committee, a political scientist who has studied decisionmaking in the purchase of auto insurance also commented that this phenomenon makes new policyholders reluctant to file claims and hence is an indirect "tax" to keep coverage. *House Hearings on Competition*, 98th Cong., *supra* note 6 at 86, 88, 92-93.

costs fall on their victims, who cannot be compensated and sometimes rely on the public welfare system rather than upon the uninsured drivers.³³³ When insurance cannot be purchased in urban neighborhoods, those neighborhoods decline and deteriorate, imposing a social cost on other homeowners in the neighborhood and on the city at large.³³⁴

People without health insurance may not seek preventive or early care, but when they become seriously ill, they probably eventually will seek and receive some kind of care even if they do not have the personal funds to pay. Their costs must be absorbed either through the public welfare system or through hospitals and doctors redistributing the costs to other patients who are insured or otherwise can pay.³³⁵

Externalities are less likely to arise in life and disability insurance. When people have inadequate coverage in disability and life insurance, the most likely effect is reduced circumstances for their families. At the extreme, some people may be forced onto the public welfare system.

The first best solution of a neoclassicist is to realize costs or benefits of externalities in the marketplace. Thus, rules that limit auto accident recovery to the assets of the driver at fault plus insurance would be seen as market imperfections to be eliminated. If insurance could be priced accurately and mandatory insurance could be enforced effectively, requiring all drivers to purchase policies with limits high enough to cover the largest losses would allocate cost efficiently and present the proper incentives for the decision to insure and to drive.³³⁶ But given the limits on accurate risk classification, this raises cries of unfairness and potential inefficiency if those deterred are the low risks in a heterogeneous risk class.³³⁷ Given existing legal rules and political realities, two economists have suggested subsidizing high risk drivers from general revenues as a desirable solution.³³⁸

Analysis of externalities occurring in various lines of insurance as a result of the interaction of existing legal rules and classification as it is practiced is complex. The point here is that assessing the efficiency of any legal solution should take externalities into account.

D. Competition in the Insurance Market

The first two subparts of this section presented a great deal of material on why competition may not minimize transaction costs in the insurance market: oligopolist

333. Keeton & Kwerel, *supra* note 15, at 149–50, examine the implications of legal rules that limit liability to assets and insurance coverage. A low asset driver does not have incentives to purchase high levels of coverage because the benefit would accrue to someone else. *Id.* at 150.

334. The link between insurance and neighborhood decline is discussed generally in the HUGHES PANEL REP., *supra* note 8, at 1–8.

335. The American Hospital Association says that in 1984 care provided by hospitals but not compensated by payment on behalf of the patient receiving care was \$6.9 billion, with only 18% of that cost covered by government subsidies. AMERICAN HOSPITAL ASSOCIATION, *THE COST OF COMPASSION* 5 (1986). They acknowledge that most of the cost of such uncompensated care is “shifted from nonpaying to paying patients as a hidden ‘tax’.” *Id.* at 4. For a discussion of why hospitals are now less willing to undertake such redistribution and may refuse care instead, see *supra* note 123 and accompanying text.

336. Keeton & Kwerel, *supra* note 15, at 173–74.

337. See *supra* note 319 and accompanying text.

338. Keeton & Kwerel, *supra* note 15, at 167–73.

practices,³³⁹ lack of consumer information,³⁴⁰ incentives for firm behavior in mutual companies,³⁴¹ barriers to competitors' entry,³⁴² and statutory ossification of expensive delivery techniques.³⁴³ Competition also can take alternative forms to price and service rivalry in the insurance market: product differentiation, motivation of intermediaries, and selection competition.³⁴⁴

Previous sections discussed the multiplicity of insurance products and the difficulty of comparing them.³⁴⁵ Competition for agents through commission structures rather than for the ultimate customer also was examined.³⁴⁶ In addition to these two types of competition, classification itself is an alternative form of competition that diverts insurers from price and service competition.³⁴⁷ One federal proposal banning or restricting a number of commonly used classifications in property/liability insurance did not limit its goals to the usual ones given (remedying discrimination and unfair classification), but also stated the objective of enhancing price and service competition.³⁴⁸

E. *Is Refined Classification Desirable?*

Four normative arguments from commentators who have argued refined classification is desirable were outlined in Part III. First, classification provides incentives to reduce the total spent on insurance and loss prevention cost of losses. Second, there is an efficiency gain from using any classification for which benefits exceed the cost of administration. Third, if price, marginal cost, and expected loss are equal, individual utility can be maximized, resources will be allocated optimally, and insurers will produce most efficiently. Fourth, classification is necessary for a market equilibrium to exist where both high-risk and low-risk insureds can buy full coverage at actuarially fair prices.

As a backdrop to all discussion of classification, one must remember that classification schemes used by insurers are relatively crude approximations of loss

339. See *supra* notes 260–63 and accompanying text.

340. See *supra* notes 321–29 and accompanying text. In his major study of competition in property/liability insurance, economist Paul Joskow, *supra* note 87, at 404, summed it up: “Undoubtedly, there is no product for which consumer ignorance is so prevalent.” A reporter who had studied the industry alleged before a House subcommittee that the consumer has “almost no information” on which to make a comparison between various insurance policies. He ascribes this to reliance on institutional advertising emphasizing company reliability to the exclusion of information on rates or policy terms. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 78 (testimony of Herb Jaffee). For a summary of studies on the lack of consumer information, see *id.* at 168–69 (testimony of Ralph Nader).

341. See *supra* note 293 and accompanying text.

342. See *supra* notes 264, 278–82 and accompanying text.

343. See *supra* notes 268–74, 277 and accompanying text.

344. Kemp, *supra* note 15, at 563–70, identifies these three alternative forms of competition. In congressional testimony, Andrew Tobias claimed most competition was marketing, not price or service rivalry. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 52. By marketing, he refers to the same phenomena described in the text as product differentiation and motivation of intermediaries as well as institutional advertising.

345. See *supra* note 322 and accompanying text. Kemp, *supra* note 15, at 563; see also Spence, *Product Differentiation and Performance in Insurance Markets*, 10 J. PUB. ECON. 427, 444–45 (1978) (product differentiation is desirable when it helps people get the specific product they want).

346. See *supra* notes 305–06 and accompanying text.

347. Kemp, *supra* note 15, at 555, 564–70; WILSON & HUNTER REP., *supra* note 67, Appendix A at 44–53; Wortham, *supra* note 1, at 404–05, particularly sources cited at 404 n.319.

348. See *supra* note 8 for citation to, and a description of, restrictions proposed in the bill.

probability.³⁴⁹ They are second-best approximations of riskiness, and an insurer's choice among possible classifiers may be based on factors other than calculations about riskiness.³⁵⁰

1. Loss Control Incentives

Professor Abraham is correct that even a "reasonably accurate" risk classification scheme that induces insureds to invest in loss prevention to reduce the probability of overall losses represents an efficiency gain if the reduction in overall losses is greater than the sum spent on loss prevention.³⁵¹ In commercial insurance, one can envision many classifications that would work this way. Professor Abraham's example is classifying those factories with sprinkler systems at a lower rate, calculated by the insurer on the basis of how much less fire damage there should be when such systems are in place.³⁵²

One could envision many examples in legal professional liability insurance. Suppose that on the basis of aggregate loss data an insurer can determine that conflict of interest claims generate a substantial cost in defending insured law firms and payment of damage awards. The insurer might be able to determine that a particular type of recordkeeping system about clients would reduce the risk and would offer a premium reduction for firms that installed the system. A law firm could calculate with some approximate accuracy whether the sum of the cost of insurance premiums plus the cost of installing and maintaining the recordkeeping system would be less than premiums without the system. If the insurer is correct about the changes in the overall probability of loss with these systems in use and many insureds adopt them, the overall losses in the system will go down and the efficiency gain will be represented by the reduction in losses minus the cost of these systems.

There are, however, relatively few classifications used in the personal lines that are verifiable, based on behavior in control of the insured that is likely to be changed in response to a premium incentive, and that will not lead to uninsured losses being externalized.³⁵³ Consider a few classifications that appear to operate in this way: low mileage discounts and cheaper rates for particular models of autos and classifications in life, health, and disability insurance for nonsmokers or those who exercise regularly. At least some insurers take these into account but low mileage, smoking, and exercise frequency all raise moral hazard problems because of the difficulty in monitoring whether insureds' representations are true.³⁵⁴

If the consequence of a classification's use is that insurance is unavailable or so expensive that it is not purchased, there may be externalities. A previous subpart

349. ⁱ See *supra* notes 64-74 and accompanying text.

350. See *supra* notes 64-71 and accompanying text.

351. K. ABRAHAM, *supra* note 15, at 65, 71-74, 77-81.

352. *Id.* at 11.

353. *Id.* at 71-74.

354. Mileage could be monitored if there were tamper proof odometers, but insurers would incur expense in verification. Insureds could be required to self-report mileage each year. If a claim were made, a misrepresentation discovered at this point could subject the insured to an insurer's defense of no coverage. This then would become a question of misrepresentation or warranty in insurance law.

discussed the uninsured or underinsured driver and the redistribution of health costs through unpaid bills of hospitals or doctors or public care.³⁵⁵

As the final section will consider, if the objective is that the cost of loss-enhancing behavior be realized by those who undertake it, there may be more effective institutional arrangements.³⁵⁶ A tax on cigarettes and alcohol with proceeds to medical care has been suggested as an alternative to plans for catastrophic health insurance.³⁵⁷

A number of classifications used in the personal lines cannot be changed at all or without great difficulty: sex, age, residence,³⁵⁸ health history. There are two ways that such classifications, in theory, could reduce the probability or magnitude of insured losses, but they are less likely to promote efficiency in the personal lines than the one previously described.

A refined classification may make insurance sufficiently expensive that the insured does not buy it. In commercial insurance, businesses may take the self-insurance option or band together to form their own insurance association. In the personal lines, many individuals would not be able to bear the cost of a substantial loss themselves or to develop a savings plan adequate to prepare for it.

Individuals instead may purchase less insurance, typically through a higher deductible or greater coinsurance share.³⁵⁹ This should act as a deterrent to deliberate destruction or frivolously incurring costs since the insured bears a portion of the cost. Choice of a higher deductible or coinsurance share, however, may encourage padded claims, for example, people inflating the cost of loss to get over the deductible or have more of the real cost paid by coinsurance.³⁶⁰ Aside from these moral hazard issues, one can theorize a greater incentive to take care. But consider how much a higher deductible or coinsurance ratio will act as an effective incentive in reducing loss in automobile, homeowner's, health, life, or disability insurance beyond the other incentives that exist to avoid accidents or ill health. In economic terms, the expected negative value of risk bearing may be decreased only slightly by readily available insurance because of the value one puts on good health and safety.

Another possible effect of this type of classification is reducing *insured* losses but not *overall* losses. If people simply do not repair damage or seek medical care, there is less call on the insurance reserve, but there has been no efficiency gain.³⁶¹ Such losses may become externalities.

355. See *supra* notes 333, 335 and accompanying text.

356. See *infra* notes 431-33 and accompanying text.

357. Zook, Moore, & Zeckhauser, "Catastrophic" Health Insurance—A Misguided Prescription?, 62 PUB. INTEREST 66, 79-80 (1981).

358. Residence, of course, can be changed but it may mean leaving friends and family, proximity to work, and so forth. Many of the zip codes receiving undesirable classification treatment are in central cities with concentrations of minority and low-income people. A variety of barriers may exist to their moving to zip codes with lower rates.

359. Deductible refers to an amount that must be borne by the insured before insurance is available, e.g., a \$100 deductible. Coinsurance means the insured pays a percentage of the loss, e.g., insurer pays 80% and insured pays 20%.

360. Kemp, *supra* note 15, at 555, 560.

361. WILSON & HUNTER REP., *supra* note 67, at 63-66, comments that such a shifting from auto insurer to the person without insurance is not an efficiency gain in the usual sense.

The third possible effect of classification on behavior is to cause some premiums to be so high that the activity to be insured is forgone: some people choose not to drive, buy a particular house, or go to a certain doctor. Further analysis of this effect shows that such results are not always efficiency gains. If territorial classification makes a house in one neighborhood uninsurable or unaffordable because the insurance cost is too expensive, the buyer may be forced to buy a more expensive or less desirable house elsewhere. The neighborhood and its residents also suffer as property conditions and values decline.

If people with a treatable condition delay seeking medical care, the condition may become more expensive to treat and result in greater work loss, etc. Here again there would be no efficiency gain. If safe young drivers are deterred from buying cars because of higher rates resulting from the group average rate for all young drivers, resources are not allocated efficiently.³⁶² Only if the drivers actually deterred from driving are the risky ones can there be an efficiency gain.³⁶³

In sum, incentive for loss control is the one justification for refined classification that makes economic sense given the approximate state of classification. However, it does not have equal force for all classifications that on their face might seem to have a loss reduction result. Such classifications should not be accepted uncritically but rather scrutinized for the way they might work and for possible alternatives that might be more efficient.

2. Efficiency Gain When Benefit to Some Exceeds Administrative Costs

Benston asserts that there is an efficiency gain from using a classification if the resulting premium reduction for some does not exceed administrative cost.³⁶⁴ But, unless the refinement in classification improves moral hazard or alters demand patterns, reclassification does not meet the usual definition of efficiency gain used in economics. All that is accomplished is a redistribution of cost.

The usual economic definitions of efficiency gain are the Pareto optimal one that no one can be made better off without making someone else worse off,³⁶⁵ and the Kaldor-Hicks definition that the gain is sufficient if the winners can compensate the losers.³⁶⁶ To illustrate, assume a group of insureds now are pooled but that use of a classification would divide them into subgroups. For example, men and women under twenty-five who now pay a premium (p) for auto insurance based on the average loss of the entire group would be classified by sex, a cheap classifier to use. If men as a group have a higher loss than women as a group, men's premiums (m), based on their group average, would be higher than women's premiums (w), based on their group average. Premiums m plus w would sum to p assuming the subgrouping did not

362. JOSKOW REP., *supra* note 150, at 145-47, notes this as a "theoretical rationale" for greater efficiency in cross-subsidization. See also Schmalensee, *Imperfect Information and the Equitability of Competitive Prices*, 99 Q.J. ECON. 441 (1984).

363. A.M. POLINSKY, *supra* note 43, at 115-17.

364. Benston I, *supra* note 11, at 497-98.

365. See Coleman, *Efficiency, Utility, and Wealth Maximization*, 8 HOFSTRA L. REV. 509, 512-13 (1980); A.M. POLINSKY, *supra* note 43, at 7, n.4.

366. See Coleman, *supra* note 365, at 513-14.

change moral hazard³⁶⁷ or affect the demand schedules.³⁶⁸ The women, who pay more than p , will be better off than they were before, and the men will be worse off. Thus, the Pareto optimal definition is not satisfied. As the women cannot compensate the men and still have any net gain, the Kaldor-Hicks definition of efficiency is not satisfied either. All that has been accomplished is a redistribution of cost.³⁶⁹

3. Benefit When Price = Marginal Cost = Expected Loss

Marginal cost for the insurance product is the expected loss of the insured, that is, the actuarially fair premium, plus variable administrative costs. Expected utility theory predicts that insureds will be willing to purchase insurance at actuarially fair premiums with a modest loading for costs.

Assume that p^1 on Figure I represents the point at which price equals expected loss plus minimum administrative costs. A previous section offered several explanations of why insureds may purchase insurance even if it is priced considerably above expected loss.³⁷⁰ Assume that an insured will purchase the same quantity of insurance even if the price rises as high as p^2 . The distance between p^1 and p^2 represents a transfer of wealth to the insurer who can now price above marginal cost and sell the same amount of insurance. This may represent an excess in profits, administrative costs, or reserves. Previous discussions outlined a number of areas where such excesses may exist in the personal lines of insurance.

A fundamental assumption of maximum efficiency at price equal to marginal cost is that it allows rational consideration of substitutes. The limits to reducing the probability or magnitude of losses as a substitute for insurance already have been discussed. Another substitute for insurance is appeals to charity or government. If such appeals are necessary, it means that insured losses alone, rather than total losses, have been reduced. If charity or government compensates such losses, the costs of the losses are still redistributed, but in a different manner than through insurance.

367. It has been argued that when a group such as young men consider themselves overcharged they are more likely to try and recoup some of their premiums by filing false or fraudulent claims. See *infra* note 372 and accompanying text.

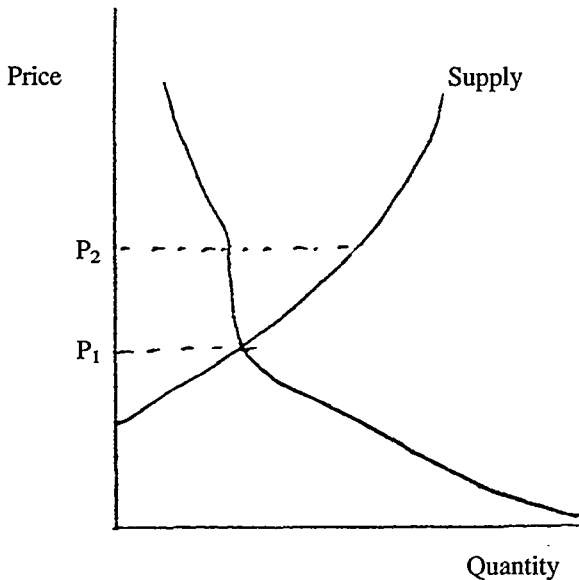
368. If some men decide not to purchase insurance when costs go up and more women purchase as costs go down, p may go down. The gain still will have been at the expense of the men who are now either uninsured or forgoing car ownership. There is no Pareto gain, and there is a Kaldor-Hicks gain only if the women gain enough to compensate the men and still have a surplus.

369. Benston states this as an obvious gain, *supra* note 182 and accompanying text. He does not discuss the possibility of the change in the demand schedules outlined in *supra* notes 367-68 and accompanying text as necessary to realize the gain.

Economists writing in the economics literature generally have not focused on this issue, but one commentator has made this point recently about groups that were pooled before a classification is introduced. Hoy, *Categorizing Risks in the Insurance Industry*, 97 Q. J. Econ. 321, 336 (1982); Hoy, *supra* note 54, at 558. Schmalensee, *Imperfect Information and the Equitability of Competitive Prices*, 99 Q. J. Econ. 441, 452 n.23 (1984) notes the similarity of his results to Hoy's, but Schmalensee's analysis focuses on horizontal equity, treating equals equally, and vertical equity, treating those who are unequal in a way that "fairly" reflects their differences. *Id.* at 447-48. He concludes that better information generally reduces vertical inequity but may well increase horizontal inequity. *Id.* at 455. He finds improvement in horizontal equity by use of a new classification depends on how much the new classification improves information and how good the initial information about buyer-specific costs was. *Id.* at 456. WILSON & HUNTER REP., *supra* note 67, at 64-65 also comments that such selection competition merely shifts losses around rather than reflecting enhanced economic efficiency.

370. See *supra* notes 294-320 and accompanying text.

Professor Abraham says pricing at expected loss avoids moral hazard because people are not given incentives to overinsure and thus be lax in taking care.³⁷¹ Another type of moral hazard problem may be created, however, if people who consider themselves unfairly priced for the coverage they must purchase are motivated to recoup their premiums by fabricating or exaggerating claims of loss.³⁷²



4. Classification as Necessary for Optimal Market Equilibrium

Much of the writing in economics journals about the function of risk classification in insurance has grown from the work of Rothschild, Stiglitz, and Wilson described earlier.³⁷³ It is a subpart of a recently developed body of economic theory that has been termed the “analytics of uncertainty and information.”³⁷⁴

Generally this body of work has been positive, concerned with explanations and predictions about the workings of the insurance market. Although it does sometimes draw normative conclusions about states that are Pareto optimal, the economic theorists writing in this area generally have not attempted to suggest public policy conclusions from their work.

A book by four professors from the Wharton School of Business and Finance summarizes much of this theoretical work and puts it in non-mathematical, intuitive

371. K. ABRAHAM, *supra* note 15, at 15. This is the second of the three types of moral hazard described in *supra* notes 56–60 and accompanying text.

372. Kemp, *supra* note 15, at 577, makes this point and cites as anecdotal evidence that the theft claim rate for under 25 males is higher in a number of jurisdictions. This might be explained in part if young drivers have cars more attractive to thieves, but it may also suggest, as Kemp does, that perceived overcharge encourages fraudulent reporting. This is the third of the three types of moral hazard discussed at *supra* notes 56–60 and accompanying text.

373. See *supra* note 152–80 and accompanying text.

374. This phrase is the title of a lengthy survey of the literature in this field, Hirshleifer & Riley, *The Analytics of Uncertainty and Information—An Expository Survey*, 17 I. ECON. LITERATURE 1375 (1979).

terms.³⁷⁵ The Wharton group uses the work to support public policy suggestions about the undesirability of government restriction of classification. In doing so, they ignore or gloss over some assumptions in the theoretical work that do not apply to the actual functioning of insurance markets.³⁷⁶

The theoretical work begins by positing a market permitting classification in which perfect information about the risks presented by potential insureds is available to insurers.³⁷⁷ It concludes that, when a competitive market with this perfect information exists, prices are driven to the actuarially fair level.³⁷⁸ This is because lower priced policies are offered by competitors to any group overcharged.³⁷⁹

Previous discussions dispute important premises of this work, namely that insurers will rush to find new classifiers to separate out overcharged subgroups and that insureds will find the premium nearest actuarial fairness and be unwilling to purchase insurance at rates substantially above this rate. The Wharton group acknowledges in a footnote that questions have been raised about consumer information, but they do not integrate into their analysis the implications of the failure of this condition.³⁸⁰

The competitive market with perfect information for classification is presented as a model against which to compare implications when information is not perfect. The Wharton group acknowledges that this state of the world will exist *both* when government restricts classification *and* when insurers do not have adequate information about risk.³⁸¹ They proceed, however, to conclude that alternatives in which the government regulates are Pareto inferior to unfettered classification with perfect information.³⁸² This ignores the previously described problems with the insurance market that exist regardless of what the government does about classification.³⁸³ The insurance market always operates in the world of the second best. The Wharton group brands regulatory solutions mandating coverage and subsidization as Pareto inferior to the ideal,³⁸⁴ but does not squarely acknowledge the impossibility of the ideal.

F. *Present Value as a Measure of Discrimination*

When one says price equals expected loss, one is saying that the price equals the expected loss for each insured, based on the classification chosen. There may be economically rational reasons for using classifications that do not predict expected loss.³⁸⁵

Even if classifications related to riskiness alone were used, and they were winnowed solely upon the basis of economically defensible criteria, it would not be correct to say that the premium calculated on the classifications chosen by the insurer

375. D. CUMMINS, *supra* note 15.

376. *See infra* notes 380–84 and accompanying text.

377. D. CUMMINS, *supra* note 15, at 30–35.

378. *Id.* at 34.

379. *Id.*

380. *Id.* at 59, 62.

381. *Id.* at 36.

382. *Id.* at 48–51.

383. *See supra* notes 72–74, 294–329 and accompanying text.

384. *Id.*

385. *See supra* notes 67–69 and accompanying text.

represents the actual expected value for an individual insured. The criteria used to winnow classifications may be appropriate to permit their use, but do not permit one to say that the value received by two insureds classified differently is the same. A premium based on some, but not all, possible classifications represents the expected loss for each member of a group with the characteristic(s) isolated. An individual might have a very different expected loss if other characteristics of his had been considered.³⁸⁶ A regulator might find, for example, that the insurer's choice of classification is defensible as a second-best approximation of riskiness and an adequately fair basis for insurance premiums, but the result is not the expected value of the theoretical actuarially fair premium definition.

The second-best approximations of expected value actually used are not sufficiently accurate to compel their usage on efficiency grounds. As one economic commentator has put it, "I know of no general theorem establishing that making information *better* always enhances efficiency . . . though making it perfect clearly does so."³⁸⁷

G. Fairness

It may seem fair in some moral sense for people with a characteristic indicating greater probability of loss to pay more for insurance.³⁸⁸ The bulk of this Article, of course, is not about perceptions of fairness but about contentions that unfettered classification discretion as practiced by insurers is economically efficient.

I have concluded elsewhere that statistical association with loss is a valid consideration in government approval of classification because of the perception of fairness and legitimacy associated with it.³⁸⁹ As acknowledged in this Article, classifications providing loss control incentives are supported by economic efficiency arguments. Statistical association of loss must exist for each such classification to provide a valid loss control incentive. I believe, however, that statistical association with loss should be seen only as a *somewhat necessary*, but not a *sufficient*, criterion for permissible use of a classification.³⁹⁰ I say somewhat necessary because a regulator might permit use of a classification that would seem to encourage loss control for which adequate data on effect was not yet available. It is not clear that insurers and their regulators now require statistical association with loss before permitting a classification's use.³⁹¹

386. Brilmayer, Hekeler, Laycock, & Sullivan, *Sex Discrimination in Employer-Sponsored Insurance Plans: A Legal and Demographic Analysis*, 47 U. CHI. L. REV. 505, 512 n.32 (1980) offered the example of the newborn, black male in South Carolina for whom life expectancy might vary from 58.33 to 70.75 years depending on indicators chosen.

387. Schmalensee, *supra* note 369, at 442 (emphasis in original) (addressing equity of prohibiting some classification variables in auto insurance).

388. Williams, *supra* note 15, at 219–24, discusses unfair discrimination in insurance rating as a moral concept.

389. Wortham, *supra* note 1, at 417–18.

390. The standards for classification that I have proposed elsewhere illustrate how such a scheme could be implemented. Wortham, *supra* note 1, at 417–18. Statistical power to predict losses and the degree of statistical separation of the grouping from other insureds are two criteria that state regulators would be required, by federal law, to consider in approving classification schemes. *Id.* See also *infra* note 406 and accompanying text.

391. Wortham, *supra* note 1, at 372–73.

Elsewhere in this Article, I argue that consideration of alternative institutional schemes to meet the ends achieved by private insurance should consider transaction costs and externalities.³⁹² It also is appropriate to consider as a criterion a Rawlsian definition of fairness in addition to statistical association with loss. John Rawls has suggested that the most just distribution of assets may be that which would have been chosen by potential beneficiaries before the natural lottery of endowments took place.³⁹³ This suggests that a countervailing consideration of controllability might outweigh statistical association with loss in some instances.³⁹⁴ For example, those suffering from disease, genetic defect, or disability on the basis of the natural lottery should not be penalized in insurance.³⁹⁵

Deciding how controllability of a classifier should be considered does not answer all difficult questions about how to apply it with regard to particular lines of insurance and particular classifications. We may decide not to penalize someone with cancer in health insurance but be more willing to allow the classifier's use to restrict the purchase of life insurance. Opinion differs on the degree of controllability there is over some characteristics, for example, obesity.

H. *Mechanics of Insurance Regulation Schemes*

Economic theory offers useful insights into the design of insurance regulatory schemes. It is likely that restriction of rating classification without other restrictions may result in insureds whom insurers would have charged a higher premium being turned down altogether or in marketing being directed to preferred applicants.³⁹⁶ If classification restriction is deemed a desirable intervention to meet an objective, it probably would have to be accompanied by some underwriting restriction to be effective.³⁹⁷

It should be considered for a particular line and a particular coverage how serious the adverse selection concern really is, that is, whether classification restriction and broader pooling will result in the best risks dropping out of the pool. If automobile insurance is mandatory and all insureds are subject to the same restrictions, it seems less likely that this will occur although some uninsured drivers will escape enforcement. On the other hand, if classifications were restricted in

392. See *infra* notes 431–37 and accompanying text.

393. J. RAWLS, A THEORY OF JUSTICE 11–17 (1971); K. ABRAHAM, *supra* note 15, at 99, discusses Rawls' concept of the "natural lottery" in discussing how broadly losses should be spread through insurance.

394. K. ABRAHAM, *supra* note 15, at 29 discusses controllability as a criterion going to egalitarian values. In an earlier article, I proposed criteria for approving insurance classifications that included controllability as a consideration to be weighed. Wortham, *supra* note 1, at 418. Those criteria are reprinted at *infra* note 408.

395. The following results lend support to the idea that, at least sometimes, people share this philosophy. In response to a Louis Harris survey conducted for BUSINESS WEEK, 75% of those questioned said that insurance companies would not be justified in refusing to insure the lives or health of people whom gene tests indicated are likely to come down with a fatal disease later in life. *The Giant Strides in Spotting Genetic Disorders Early*, BUS. WK., Nov. 18, 1985, 82, 85.

396. Thus, I agree with the predictions of those cited in *supra* notes 150–51 and accompanying text.

397. Massachusetts, Michigan, New Hampshire, North Carolina, and South Carolina have adopted a form of full insurance availability for automobile insurance. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 163. Michigan has such a system for homeowner's insurance. *Id.* Such systems require companies to take all risks meeting certain criteria but allow some ceding to a reinsurance facility of those claimed undesirable. FIA, *supra* note 127, at 73–76, 78–82.

individual health insurance, it might be that this already costly product would become so expensive that many people would be unable to buy it.

Earlier three types of moral hazard were identified: 1) when the insured might purposely cause harm or otherwise falsify loss; 2) when the fact of insurance might induce greater use of an insured service or cause the insured to take less care; and 3) when rates are supposed to reflect judgments about riskiness but the insurer cannot gain reliable information in possession of the insured on that risk.

The first and second types of moral hazard have little to do with the classification controversy because there is probably no reliable way to divine many classifications that select people more prone to commit fraud.³⁹⁸ This type of moral hazard may be a factor in why otherwise beneficial insurance markets may fail to arise.

The third type of moral hazard is raised in the classification controversy because classification reliability is argued as justification for immutable classifications like sex³⁹⁹ and raised as a problem with the classifications that reformers often wish to substitute such as smoking habits and mileage of cars driven.⁴⁰⁰ Insurance law doctrine on warranty and representation exists in part to deal with such problems.⁴⁰¹ Explicit and conspicuous warnings on insurance applications about the consequences of misrepresenting information on an insurance application might be helpful in reducing these concerns.

V. PUBLIC POLICY IMPLICATIONS

In a previous article, I criticized the assertion in public debate on regulation of insurance classification that unfettered discretion of insurers to classify promotes fairness because insureds then pay their fair shares.⁴⁰² I also rejected the contention that refined classification is urged, if not required, by state law.⁴⁰³ The focus here has been to examine another common argument—that economic reasoning supports insurers' discretion to classify and rejects government restriction of classification.

After giving background on economic theory on insurance and insurance practices, Part III outlined the economic analyses of classification that have appeared in law and public policy literature. My major conclusion is that the explanatory, predictive, and prescriptive power of almost all these analyses depends on assumptions about a competitive market and accurate information about risk that are highly questionable. Part IV reviews material questioning those assumptions for the insurance market and suggests instead many instances of market failure on the supply and demand sides.

The following discussion of public policy implications is divided into two sections. The first assumes the basic framework of existing private insurance markets

398. Ghezzi, *supra* note 57, at 521, reports estimates in Massachusetts of 25% of reported theft claims as fraudulent. Kemp, *supra* note 15, at 560, a former official in the Massachusetts Insurance Department, reported observations of 10 to 20% fraudulent and padded claims in some lines such as auto.

399. Benston I, *supra* note 11, at 509–10.

400. *Id.*

401. R. KEETON, *BASIC TEXT ON INSURANCE LAW* 369–409 (1971).

402. Wortham, *supra* note 1, at 370–80.

403. *Id.* at 381–92.

with government regulation, and reforms discussed are limited to legislated changes in regulation schemes.

The second section suggests beginning without assuming the status quo and applying an institutionalist perspective on whether there are alternative structures that would take into account the limits on human rationality and perfecting information. Thus, one would consider whether there are structures alternative to the market to reduce transaction costs. The second section also argues that analyses of efficiency of particular reforms should take externalities into account.

Specific proposals for change in each of the personal lines of insurance is beyond the scope of this Article. Part IV offers enough data to question some common shibboleths in the classification debate but not enough information about individual lines and their markets to advocate specific changes.⁴⁰⁴ My purpose has been to strip away the legitimacy of catch phrases that stifle debate, suggest ways to reframe issues on the economics of insurance classification, and expand the parameters of reforms considered.

A. Reforms Within the Existing Framework

Given the highly imperfect world of actual classification,⁴⁰⁵ there is no general justification for insurers' unfettered discretion to use the classifiers they select from all possible classifiers. Thus, there is not necessarily a diminution in efficiency in all instances when regulators restrict classification discretion.

The fact that insurers choose only one or a few of all possible classifiers is also the reason why expected value calculated on classifications chosen is not the single appropriate definition of discrimination as contended by the defendant employer in *Arizona Governing Committee v. Norris*.⁴⁰⁶ The Supreme Court rejected such a definition for discrimination under Title VII of the Civil Rights Act of 1964 and found a violation of the Act in requiring larger contributions from women in order to receive equal annuity benefits.⁴⁰⁷

Elsewhere I have outlined a proposed legislative scheme that would prohibit some classification and require regulators to weigh stated criteria in approving other proposed classifiers.⁴⁰⁸ One of the criteria suggested is "the degree of incentive

404. If insurance were federally regulated, there probably would be more public information on practices and market behavior. In 1980, Congress required that any study of the Insurance Industry by the Federal Trade Commission be requested by a majority of the Senate Committee on Commerce, Science and Transportation or the House Committee on Energy and Commerce. 15 U.S.C. § 46 (1982). Since insurers are immunized from general federal laws by the McCarran-Ferguson Act, 15 U.S.C. §§ 1011-15 (1982), information that might be generated in litigation, e.g., antitrust cases, such as data on collusive practices, market structure, and competition is not available.

405. See *supra* notes 72-74 and accompanying text.

406. 463 U.S. 1073, 1082 (1983).

407. *Id.* at 1083.

408. The full list of criteria I proposed that state regulators be required to weigh in approving other classifications are:

- A) the statistical power of the characteristic's prediction of loss;
- B) the degree of statistical separation of the grouping of insureds from the remainder of the insured population which results from the use of the category;
- C) whether the characteristic's relation to loss can be supported by a persuasive causal explanation;
- D) the degree of incentive created by the use of such characteristic in rating for reduction in number or cost of losses;
- E) the degree to which the classification is controllable by individual insureds;

created . . . for reduction in number or cost of losses.”⁴⁰⁹ Even with the approximate accuracy of classification achievable, classifications that actually provide a trade-off between the cost of loss prevention and the cost of insurance provide an efficiency justification. Part IV suggests, however, that there may be relatively few such classifications in the personal lines that are verifiable, based on behavior in control of the insured that is likely to change in response to a premium incentive, and that will not lead to uninsured losses being externalized.⁴¹⁰ Even classifications that present such incentives properly might yield to other goals of insurance law.⁴¹¹

As described in the Introduction, insurance classification often is characterized as a zero-sum game in the classification debate.⁴¹² This has potent political effect because it turns subgroups of insureds against each other and deflects scrutiny from the part of the premium dollar that may go to excessive administrative expenses, reserves, or profit. Without any other change, restricting classification discretion will redistribute the cost of losses among insureds.⁴¹³ Much of this Article suggests looking at whether there are “other changes” that could reduce an insured’s premiums or hold it constant even with classification restriction.

Neoclassicists offer many proposals to pressure price competition in ways that would pressure reduction in transaction costs. As described earlier, proposals have been made to repeal state laws deemed barriers to competition: anti-rebate,⁴¹⁴ fictitious group statutes and regulations,⁴¹⁵ agents’ property rights in renewal,⁴¹⁶ rate regulation itself,⁴¹⁷ etc. The McCarran-Ferguson Act exemption from federal laws, not specifically applicable to insurance, also has been proposed for repeal, with

F) the compatibility with widely held social values of the use of the characteristic by which the grouping is defined; and

G) the alternatives to private insurance coverage that are available to potential insureds who cannot get this insurance. Wortham, *supra* note 1, at 417–18. I also advocated a ban on race, color, religion, sex, and national origin classification. For more detail on my proposed scheme and a comparison of these criteria with those proposed by others, see *id.* at 417–20.

409. See *supra* note 408, subparagraph D.

410. See *supra* notes 351–63 and accompanying text.

411. My proposal for federal standards of judging classification includes: controllability, social values, and alternatives to private insurance coverage for those who cannot obtain it, in addition to incentives for loss control and their relation to riskiness. Wortham, *supra* note 1, at 417–18. My seven criteria are reprinted in note 408 *supra*. They would be weighed by state regulators, who would be required to make written findings on their decisions. Wortham, *supra* note 1, at 418.

K. ABRAHAM, *supra* note 15, at 8–36, discusses three purposes he sees insurance law serving—economic efficiency, fair distribution of risk, and the promotion of equitable relations between insurers and insureds. Providing incentives for loss control serves the economic efficiency purpose. He sees three philosophies competing to define a fair distribution of risk—libertarianism, utilitarianism, and egalitarianism. *Id.* at 18–29. His approach is “intuitive pragmatism” that weighs values when there is a conflict. *Id.* at 29–31. Abraham says, and I agree, that he would like to see more influence by egalitarian values in insurance law. *Id.* at 30. He does not have a philosophical problem with fairness concerns outweighing efficiency concerns, but analyzes complications created in the market in trying to achieve the fairness objectives. *Id.* at 96–100. One of these is that insurers will restrict underwriting in reaction to restrictions on rating discretion. See *supra* note 150–51 and accompanying text. Austin, *supra* note 66, at 558 n.257, cites Critical Legal Studies philosopher ROBERTO UNGER, KNOWLEDGE & POLITICS 94–95 (1975), on the impossibility of weighing values that are subjective.

412. See *supra* notes 1–9, 144 and accompanying text.

413. See *supra* notes 364–69 and accompanying text.

414. See *supra* note 265 and accompanying text.

415. See *supra* note 272 and accompanying text.

416. See *supra* note 268 and accompanying text.

417. See *supra* note 261 and accompanying text.

exemption from most antitrust laws being the major focus of concern.⁴¹⁸ Although the neoclassicists are wary of government, they will contemplate an affirmative role in the provision of information: printing shopping guides with price information,⁴¹⁹ mandating a standard disclosure format,⁴²⁰ and requiring disclosure of agent commissions.⁴²¹

I agree with the economic prediction that restricting classification may result in reduced availability unless underwriting also is restricted.⁴²² With classification in rating and underwriting restricted, costs for some insureds probably will go up if there are no commensurate reductions based on transaction costs.

Whether classification restriction is a desirable tool to achieve a goal like greater perceived fairness or availability of coverages should take into account the adverse selection consequences of those who may drop out of the insurance pool as costs go up. For example, if the cost of individual health and disability policies goes up because particular genetic traits, tendency toward diseases, or health histories cannot be used as classifications, the healthiest in insurance pools may decide to forgo coverage.⁴²³ Coverage likely would become more expensive. If automobile insurance is mandatory, the adverse selection problem is likely less severe although studies show enforcement of mandatory schemes is difficult.⁴²⁴

Restricting classification as a tool to achieve goals such as greater insurance availability or fairness also raises questions about whether the pool of people buying the coverage is the appropriate group to share additional costs. Mandatory automobile coverage means cost is widely spread. Those buying auto insurance may be an appropriate group to share the cost of insured losses.⁴²⁵ If there is a social obligation to care about health care and the support of people who are ill, more of the population than those who buy individual disability or health policies should bear the cost.⁴²⁶

418. E.g., S. 2474, 96th Cong., 2d Sess. § 3, 126 CONG. REC. 6530 (1980). See also *House Hearings on Competition*, 98th Cong., *supra* note 6 (generally addressed to McCarran-Ferguson repeal).

419. Senator Metzenbaum's Insurance Competition Improvement Act would have required the states to prepare such guides. S. 2474, 96th Cong., 2d Sess. §§ 7, 9, 126 CONG. REC. 6529, 6531 (1980). See *supra* note 8 and accompanying text for other information on the bill.

420. *House Hearings on Competition*, 98th Cong., *supra* note 6, at 156-57 (recommendation of Ralph Nader) and 245 (recommendation of Herbert Denenberg citing New York state's experience with the practice). *Id.* at 246 (testimony of Herbert Denenberg) and at 683-90 (testimony of James Hunt, former Vermont Commissioner of Banking and Insurance testifying for the National Insurance Consumer Organization). The late Senator Philip Hart, one of the most aggressive congressional investigators of insurance practices, advocated a "truth-in-life-insurance" law. *Cost Disclosure Hearings*, *supra* note 323, at 183 (1973 interview with Senator Hart).

421. See *supra* note 266 and accompanying text.

422. See *supra* note 150-51 and accompanying text.

423. An illustration of this problem can be found in the development of Blue Cross/Blue Shield. Such plans typically were "community rated"—the rates were based on all insureds in the area rather than separate for each employer group. Commercial insurers began to break into the market and rate groups individually so groups with smaller losses, that is, groups with many young, healthy people, opted out of the Blues. This ultimately lead Blue Cross/Blue Shield to abandon community rating. S. KIMBALL & H. DENENBERG, *supra* note 108, at 53-54.

424. One insurance text says people frequently evade such laws by dropping the policies after registering their cars or by registering their car in another state that does not require insurance. F. CRANE, *supra* note 58, at 117. He reports that California found 15% of its drivers to be uninsured. *Id.* He also reports that Illinois, which does not mandate insurance, had 85% of drivers insured. *Id.*

425. K. ABRAHAM, *supra* note 15, at 99.

426. *Id.*

This suggests redistribution at least to group health and disability policies and perhaps from a subsidy from general revenues.⁴²⁷

B. Beyond the Existing Framework

As previously discussed, there have been numerous proposals to enhance the workings of the market with increased information to help insureds compare products and negotiate with insurers. The institutionalists ask whether real people, as opposed to theoretical ones, will process adequate information, not only to decide between companies but also to decide what they should buy.⁴²⁸

Generally, few proposals have called for a government role in enhancing consumer information about rational insurance buying.⁴²⁹ The government could provide more information about the actual incidence of potential risks and the availability of types of insurance that address them, as well as their relative payoffs.⁴³⁰

An institutionalist also might urge us to consider accepting bounds on rationality and limiting choice. Perhaps important kinds of insurance should be mandated.⁴³¹ Perhaps insurance products as well as disclosure should be standardized.⁴³² Perhaps the payoffs on some so-called "junk" coverages are so low that they should be banned from the marketplace.⁴³³

Given the inherent problems in the market, reform proposals beyond those directed toward improving the market should be considered. There may be alternative structures that could reduce transaction costs and reduce possibilities for opportunism while preserving desirable loss control incentives. No-fault proposals shift the distribution of risk but retain the private insurance market.⁴³⁴ It has been proposed that the cost of automobile accidents might be spread more cheaply, perhaps more fairly, and with better deterrent incentives by a tax on gasoline or tires.⁴³⁵ Funding catastrophic health insurance through a tax on alcohol and cigarettes has been suggested as well.⁴³⁶

Evaluation of economic efficiency should be considered as a factor in the cost-shifting of insurance that goes beyond the insurance pool. One should consider where the expenses of uninsured and underinsured persons are allocated.⁴³⁷ Much of that cost is redistributed through mechanisms other than insurance.⁴³⁸

427. A federal proposal in the last Congress would have required states to establish residual market mechanisms for individual health insurance with rates to 150% of private market rates. Rich, *Hill Panels Seek to Improve Health Care for Poor*, Wash. Post, Aug. 5, 1986, A13, col. 2. Because the proposal requires that the excess be made up by employers of 20 or more employees, the cost is redistributed more broadly.

428. See *supra* notes 294–320 and accompanying text.

429. An exception is proposals discussed generally in Kunreuther, *supra* note 25, at 250–54.

430. *Id.* at 251–52, discusses this possibility with regard to flood and earthquake insurance.

431. *Id.* at 252–54 (disaster insurance).

432. See *supra* notes 321–29 and accompanying text.

433. A. TOBIAS, *supra* note 240, at 73–74, reports that New York, New Jersey, New Hampshire, Connecticut, and Massachusetts have banned or severely restricted the sale of cancer insurance.

434. See *supra* notes 285–87 and accompanying text.

435. A. TOBIAS, *supra* note 240, at 197–204 (1982) (tax on gasoline); Vickrey, *supra* note 15, at 471–75 (tax on gasoline or tires).

436. Zook, *supra* note 357, at 79–80.

437. See *supra* notes 333–38 and accompanying text.

438. See, e.g., *supra* note 335 and accompanying text.

Availability of insurance should be debated more squarely. Elsewhere I have argued that a nationwide study of availability gaps be made in order to spur a public debate on whether there are people society is willing to tolerate being uninsured and how broadly the risk of particular losses should be shared.⁴³⁹

VI. CONCLUSION

A paradox exists between the general and the specific in thinking about insurance problems. The usual concentration on specific lines of insurance and, in classification, on particular classifiers limits the likelihood of conceptual thinking.⁴⁴⁰ Bringing economics to bear on the law encourages theoretical thinking as well as providing specific insights about possible outcomes of particular legal rules and potential unintended consequences.

At the same time, before specific reforms are adopted or rejected, policy advocates and policy makers must consider the world that exists as well as the theoretical one. For insurance, this means considering the reality of the market and the limits to its perfection. A paragraph ago I criticized thinking based on insurance lines. Still before solutions are adopted, their probable functioning must be considered in the context of specific lines of insurance.

Insurance classification raises questions about who should bear the risk of crucial functions in our society. It deserves analysis free from cant and open to imaginative consideration of alternatives. Past public policy debate has been too narrowly focused. It begins by assuming a private insurance model and limits the debate to whether we should tinker with classification discretion. Proposals to enhance competition usually are made only within the framework of existing types of insurance and their markets.

Instead, from time to time we should lift our eyes from examining the past and the status quo and consider the functions insurance is supposed to serve in our society. Economic theory has much to offer in predicting unintended consequences that could result from various arrangements and reform proposals designed to perform or encourage performance of these functions. At the same time, before deciding what public policy should be on classification and other insurance regulation matters, we ought to return to the complex reality of how people actually behave, the web of laws and regulations already in place, and the limits to perfecting information in a business founded on predicting the unpredictable.

439. Wortham, *supra* note 1, at 420–21.

440. K. ABRAHAM, *supra* note 15, at 64, makes this point. His excellent book is one of the few exceptions.